

October revision 2022-2023

Concept 1 Lesson (1) Adaptation and survival

How living organisms protect itself from extreme heat of the sun?

Desert lizard: by finding shaded area.

Palm leaves: covered with waxy layer.

Human being: by using umbrella and light clothes.

These different ways for protection known as:

Adaptation: It is a way that helps the living organism to survive in its environment.

G.R: the importance of adaptation for living organisms

To survive and reproduce.

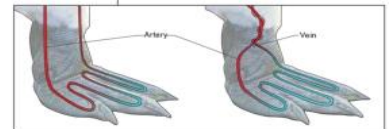
Climate is considered one reason for adaptation of penguins to survive in cold environment:

Penguins

1-Penguins are cold adapted for living in Antarctica where it is very cold.

2-has fat layer and thick feather on his body to keep its body warm in the freezing cold.

3- How penguin keeps its toes feet from freezing?



The warm blood vessels from body weave around the cold blood vessels from feet to heat up.

Camouflage: It is an example of adaptation in which some animals hide from predators or preys by blending with surrounding environment.

Ways of adaptation in some living organisms:

1. Polar bear:

It has thick white fur to:

- Keep warm.
- Blend with snow to catch its prey



2. Brown or black bear:

It has dark brown fur to:

- Help it to hide between trees during catching its prey



3. Caracal: | It is a mammal animal .

It is a carnivorous animal eats meat :

a. It has golden fur, to help it hide in desert.



4. Fennec fox:

It is a small foxes:

a. It has large ears.

b. It has golden fur, to help it hide in desert.



5. Lizards:

have colorful scales that help them to hide between coloured rocks in the desert to:

a. hides from enemies.

b. catch preys.

In very high temperature, lizards use burrows and go to shady places as a means of adapting to the desert heat.

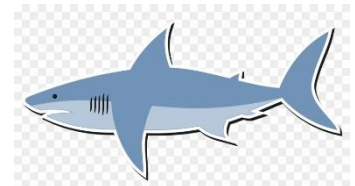


6. Bull shark:

It can live in fresh and salt water.

It has countershading

This helps the animal to blend into the water and catch their preys



Lesson (2) Types of Adaptations

Types of adaptation:

Structural adaptation (physical adaptation)	- Behavioral adaptation
<p>It is a change in the structure of animal body to adapt its environment</p> <p>The blood vessels in the penguin feet</p> <p>The thick fur of the polar bear</p>	<p>It is a change in the behaviors (acts) of animals groups to adapt its environment</p> <p>Migration of some animals towards certain region</p> <p>Desert lizard looks for shade in hot sun</p>

Adaptation of foxes to survive in their environments:

Fennec fox	Arctic fox
habitat	
It lives in hot desert	It lives in tundra
Structural adaptation	
<p>It has tan colored coat</p> <p>To hide in sandy environment</p> <p>To protect from the hot sun</p>	<p>It has thick fur coat</p> <p>To keep body warm in cold climate</p> <p>- It has white fur coat in winter – brown in summer</p> <p>To sneak up on prey in any season</p>
<p>It has extra-large ears</p> <p>To lose heat to cool its body</p>	<p>It has short ears and legs</p> <p>To help it stays warm</p>
<p>It has a special shape of ears</p> <p>To allow good hearing for hunts</p>	<p>It has a special shape of ears</p> <p>To allow good hearing for hunts</p>
Behavioral adaptation	
<p>It pants like dogs</p> <p>To cool its body</p>	
<p>It lives in burrows</p> <p>To stay cool in sunny days</p>	<p>It lives in burrows</p> <p>To stay warm at night</p>
<p>It eats different kinds of food</p> <p>Bec. hard to find food in desert</p>	<p>It eats different kinds of food</p> <p>Bec. hard to find food in tundra</p>

Adaptation of foxes to survive in their environments:

Lizards are from **reptiles** – Bodies of reptiles (lizards) covered with **scales**.

Bull shark	Panther chameleon (lizard)
habitat	
It lives in fresh and salty water Unique advantage	It lives in tropical rainforest
Structural adaptation	
It has dark back and white belly To sneak up on prey by countershading strategy	It has bright colored scales To camouflage with surrounding environment
It has sharp teeth To tear prey's flesh	Its eyes move in opposite directions One eye search food The other eye to avoid danger
	It has very long sticky tongue To hunt insects for feeding
	It has V-shaped feet and tail like a hand To hold tightly the branches of tree
Behavioral adaptation	
It can hunt in salty and fresh water So, It feeds on different types of food	In danger it scare its attacker by: <ul style="list-style-type: none"> - It puffs up its body with air. - It opens its mouth wide. - It changes scales color.
It hunts in the day and the night So, Its prey can't predict hunt time	

Lesson 3 : Plant adaptation

- plants have the ability to adapt in their environment

From this environment :

Savannah forest in Africa

Lack of water – drought climate -
Grassland soil has mild temperature

Acacia tree (umbrella-shaped tree)

Amazon rainforest of Brazil

Plenty of water - Soggy soil (wet mud soil)

Kapok tree (umbrella-shaped tree)

Adaptation of two terrific trees to survive in their environment:**Acacia tree:**

Habitat: It grows in Savannah Forest in Africa

Structural adaptation

It has very long root (taproot) To search for water in deep soil

It has very long trunk Most animals can't feed on its leaves except giraffe

Acacia tree store water in its trunk It has tiny leaves on its top To hold water to make food

It has sharp spines leaves To protect from hungry animals

Behavioral adaptation

Acacia tree can defend itself: It produces a poison when animal eat its leaves. (bad taste) - Send smelly message to near tree.

Kapok tree

It grows in Amazon rainforest of Brazil

Structural adaptation

It has large wide roots (buttress roots) To hold the tree in the soggy soil

The roots grow up around the trunk To hold the tree in the soggy soil.

It has hand-shaped leaves with narrow parts to allow wind move gently without tearing (cutting)

Behavioral adaptation

It sends delicious smelling messages to invite bats by wind

Mangrove tree:

Structural adaptations:

It lives in salt water – it has long and strong roots to resist the waves



Water lily:

It lives in wetland – it has wide leaves float on water to absorb sunlight.

**3- Palm tree:**

It lives in desert – it has thick roots and small leaves to resist strong winds.



4- Pine tree: It lives in snow – it has triangle tree and short branches to allow snow to slides over So, don't break. - It has needle leaves prevent plant from lose of water.



Lesson (4) Digestive system

* The body of living organism consists of systems as digestive - respiratory – nervous

Each system consists of organs as :

two lungs – heart – stomach – brain. Note: Digestive and respiratory system are working together to get energy from food and breathing.

- The body gets nutrients from food to get energy.
- The body needs energy: To do activities as (walking – talking – sleeping) To do body functions as (heart beating – breathing – thinking) Human digestive system
- To get nutrients from food, the food must be digested.

Digestive system:

-A system breaks food into small parts that a body uses to get energy.

Digestion process: A process of breaks food into small parts that a body uses to get energy.

The structure of digestive system: Mouth – Esophagus – Stomach – Small intestine – Large intestine.

Notes: Digestive system starts with mouth and ends with anus.

1- Mouth:

Digestion of food begins in the mouth.

Mouth contains: Teeth – Tongue – Saliva (liquid substance in mouth)

- Function of teeth: It breaks and crush food during chewing.
- Function of tongue: It mixes food with saliva in mouth.
- Function of saliva: It facilitate the swallowing of food – digest starch into sugar.

2- Esophagus:

A long muscular tube. • Function of esophagus: It moves the food down into the stomach.

3- Stomach: A muscular organ.

- Function of stomach: It mixes food with stomach acid to get soupy liquid.

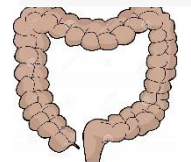
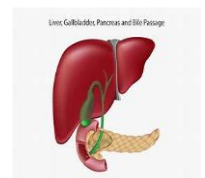
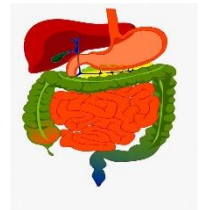
4- Small intestine:

A long coiling tube with length 6 meter.

- Food is broken into simple nutrients.
- The blood carry nutrients to all body parts.
- Function of small intestine: complete digestion of food – absorb nutrients

5- Pancreas and liver: secrete juice in small intestine to help in breaks food into nutrients.

Large intestine: A tube starts from end of small intestine and ends with anus.



- **Function of large intestine:** It absorb water from wastes to become solid wastes come out through anus.

What happen : When one organ of digestive system is absent. ?

The system cant performs its function properly.

How to keep digestive system healthy?

- 1-Chew the food well
- 2-Don't eat much fast meals.
- 3-Drink a lot amount of water.

Respiratory System

A system is responsible for breathing.

Respiratory system:

supply the body with oxygen gas and gets rid of carbon dioxide gas.

Respiration process:

A process by which air carry oxygen gas into the body and get rid of air carry carbon dioxide gas out of the body.

Human respiratory system consists of:

Nose – Throat – Trachea – Two lungs – Diaphragm. • During breathing air pass from nose, throat, trachea into two lungs (like 2 balloons).

- The trachea branched into two bronchi and bronchioles.
- Air sacs (Alveoli) in lungs surround with blood vessels to extract oxygen gas from air.
- The blood carry oxygen gas to all body parts.
- Our bodies need oxygen gas to do their functions.
- Carbon dioxide is a harm waste product we must expel out in exhalation.

Diaphragm: A large muscle directs inhalation and exhalation process.

- **Respiration includes:**

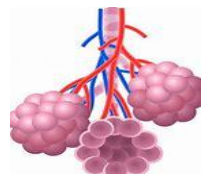
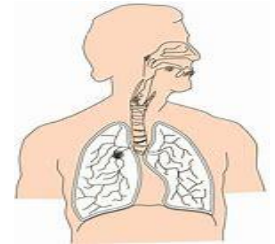
Inhalation and Exhalation process.

In inhalation: diaphragm contracts down to enter oxygen gas –

Chest size increase.



In exhalation: diaphragm relaxes upward to expel carbon dioxide out – Chest size decrease.



How to keep respiratory system healthy ?

- Avoid smoking
- Eat fruits as orange (vitamin C)
- breathe clean air.

Lesson (5) How Fish Breathe

- Fish lives in water environment.
- Human have lungs to breathe in air, while fish have gills to breathe under water.
- Oxygen gas is very important for breathing (inhalation)



Adaptation of fish to breathe under water :

- Fish have gills to allow it to live and breathe under water.
- Gills are found on sides of a fish's head.
- Blood vessels carry oxygen gas to all body parts (In human and fish).
- Gills of fish are considered as unique structural adaptation that allow fish to live and breathe under water.
- **Water pollution affects fish healthy.**

Human Change the ecosystem

- **There are 2 types of changes:**

Natural changes of ecosystem

usually, slow change and done by nature organisms can adapt this change.

Human activity changes of ecosystem

usually, rapid change and done by human. Organisms can't adapt this change cause move, disappear, die or extinct of organisms.

Lesson (6) Amphibians

Amphibians:

they are small animals can live in moist environments (rainforest – stream - ponds)
Examples of amphibians: Frogs – Toads – Salamanders.

- **Amphibians can breathe using lungs on land (like human) But they can also extract oxygen from water using skin organ. (Structural adaptation)**
- **Amphibians respire through lungs and skin.**

Factors cause extinction of amphibians:

- 1- Water and air pollution.
- 2- Destroying natural habitat.
- 3- Viruses in water.

To protect amphibians must clean air and water as:

- 1- Avoid throwing waste materials in water.
- 2- Dispose of chemicals in a correct way to avoid water pollution

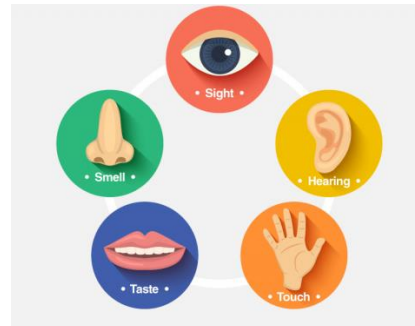


Concept 2 Lesson (1) Senses

- **All living organisms receive stimuli from environment and makes respond to them.**
- **Stimuli as cold – hot – smooth – rough**
- **The five senses: Hearing – Sight – Taste – Smell – Touch**

- **The five sense organs:**

- Ears for hearing
- Eyes for sight
- Tongue for taste
- Nose for smell
- Hand – skin for touch



- **Humans can listen to music by sense of hearing by ears organ.**
- **Owls have extra sense of hearing and sight to find their preys in dark**
- **Dogs have sharp sense of hearing and smell for guarding. Dogs have sense of smell and sight for recognize friends by scent.**
- **Fox and deer have sense of hearing and sight to avoid danger.**
- **Chameleon has sense of sight and taste for searching food.**
- **Monkey has all five senses to identifying things.**
- **The Egyptian mongoose makes sounds for moving or searching food.**

Dolphin Super Senses Dolphins have sharp sense of Hearing to hear all sound tones.

- Super senses of dolphins help them to: Survive – search of food – protect them under water.
- Dolphins use a property known as “ Echolocation “ that depend on “ Echo “ To locate their preys and objects in water.
- Echo: is reflection (bouncing off) of sound waves back from surface to its source.

Lesson (2) Super Sensory Organs Nocturnal Animals:

A group of different animals that look for their preys at night.

- Why animals active at night: To look for food – To hide from preys.

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Lesson (2) Super Sensory Organs

Nocturnal Animals: A group of different animals that look for their preys at night.

- Why animals active at night: To look for food – To hide from preys.
- Super Sensory Adaptation of Nocturnal Animals
 - 1- Snake Super Sensory Adaptation: Snake is from reptiles. Snake has ability of heat sense by special part in their face. to locate their preys.
 - 2- Bat Super Sensory Adaptation: Bat is from flying nocturnal animals. Bat use Echolocation property using sound waves by hearing sense. (Like Dolphins) To locate their preys (insects) using Echo.
 - 3- Owl Super Sensory Adaptation: Owl is from flying nocturnal animals. Owl has extra eyesight and strong hearing sense Owl has bowl-shaped face can detect distant sounds and quiet movements. The Nervous system

The nervous system consists of:

- 1- **Brain:** the main control center of the body.
- 2- **Spinal cord:** carry messages from brain to body and from body to brain. Spinal cord passes through the backbone.
- 4- **Nerves:** carry messages from brain and spinal cord to body and vice versa. Nerves of eyes and heart connect directly to the brain.

Sensory organs:

receive information from environment by sensory receptors.

Sensory receptors:

nerves found in sensory organs receive information from environment.

Lesson (3) Sensing of the Environment

• What when touch spines of cactus plant?

Withdraw hand fast in one second.

Egyptian jerboa:

is a desert rodent with very large ears (like fennec fox) and small eyes.

Egyptian jerboa Adaptation:

it has long hind legs to help it jump long distances.

- A jerboa's feet and toes have hair to help it catch sand is Structural adaptation.
- Hopping a jerboa in zigzag paths to run away from danger is Behavioral adaptation.
- A jerboa has large ears use hearing sense it can hear snake. (like fennec fox) How jerboa's body work together to avoid danger?

Lesson (4) Reaction time and Response

Reaction time:

-is the period from sensing danger to being away from it.

- The shorter reaction time to a danger, the greater chance of survival.

-Nerves links between sense organs and the brain.

- The response of eye nerves is faster than of ear nerves.

• Examples:

When you smell bad odour, nerves in nose send a signal to the brain to make respond. When you touch hot object, nerves in hand send a signal to the brain to move hand away.

Lesson (5) How the Nervous System Works

Function of nervous system:

- 1-Collecting information inside and outside the body then send to the brain through nerves.
- 2-The brain processed this information and sends a response.
- 3-Nerves transmit information from sensory organs to the brain in form of electric impulses.

Role of sensory organs in processing information:

- 1-The sensory organs (eyes – ears – skin) gathering information by sensory receptors.
- 2- The nervous system (nerves) sends information from sensory organs to the brain to be processed.

Note:

-The components of nervous system are connected to nerves to transmit information (messages) throughout the body parts.

-Sound waves:

A type of waves transmitted from ears to the brain.

Reflex action:

A type of messages transmitted as so fast. Examples of reflex action:

- 1-You blink your eyes when something comes near it.
- 2-Your hand moves away quickly when touch a very hot object (plant spines).

Concept 3 Light and Sight

Nervous system

A system that send information from sense organs to the brain to process it.

Nervous system: A system that works with eyes for seeing objects.

The eye: is the organ of sight.



Humans: need light to see objects.

Night vision goggle:

A tool used by human can depend on to see at dark.

Nocturnal animals

Animals have night vision to hunt at night such as:

Fishing cat	-A wild cat that have glow eyes to hunt at night by sight sense. -has glow eyes because it has a mirror-like membrane on back of eyes that bounce off (reflect) light (Structural Adaptation)	
Tarsier monkey:	has huge eyes to hunt at night by sight sense.	

Note:

- Cat eyes are structural adaptation but activation of animals at night is behavioral adaptation.

Sources of light: Objects that gives off (emits) their own light.

Examples of light sources: The sun – Electric lamps – candles – flash night – fire. The moon

mirror not a source of light as they reflect (bounce off) light.

- Human can see objects that give off light or reflect light.
- The eye can see when light fall on object and bounce back (reflect) to the eye.

Concept 1

1: Choose :

1- One of the behavioral adaptations that help the animal protect itself from enemies

(**Camouflage** - extinction - immigration - reproduction)

1- من التكيفات السلوكية التي تساعد الحيوان على حماية نفسه من الأعداء (التخفي - الانقراض - الهجرة - التكاثر)

2-Bat is.....animal. (**nocturnal**-morning-Harmful - don't fly)

2 - الخفافيش حيوانات (ليلية- صباحية - ضارة - لا تطير)

3-..... is covering body arctic fox
(heavy hair - heavy skin - **thick fur** - many feathers)

3 - يغطي جسم الثعلب القطبي (وبر كثيف- جلد ثقيل - فراء كثيف - ريش كثير)

4-The roots of palm plants help them to(Stand strong against the wind
– reach the underground water - Fixation of plants in the soil -**all the above**)

13-جذور نباتات النخيل تساعد على (الصمود أمام الرياح - الوصول إلى المياه الجوفية- تثبيت النباتات في التربة - جميع ما سبق)

5 -.....panting to lower her body temperature.
(Whales - Lions -**Foxes** - Bats)

5- تلهث لخفض درجة حرارة أجسامها. (الحيتان - الأسود - الثعالب- الخفافيش)

6- Adaptation processes include changes that in the environment.

- (a) reduce the chances of survival
- (b) reduce the life span of individuals
- (c) **improve the survival of the species**
- (d) reduce the reproduction process

6- تشمل عمليات التكيف التغييرات التي..... في البيئة . (تقل فرص البقاء على قيد الحياة - تقلل العمر الافتراضي للأفراد - تحسن بقاء الأنواع - تقلل عملية التكاثر)

7- What is adaptation ?

- (A) The process by which new species appear.
- (b) **A property possessed by living things to help them survive.**
- (C) A form of pollination for trees.
- (D) A process of getting rid of harmful substances in living things.

7- ما هو التكيف ؟ .. (عملية تظهر بها أنواع جديدة - خاصية تمتلكها الكائنات الحية لمساعدتها على البقاء- شكل من أشكال التلقيح للأشجار- عملية تتخلص بها الكائنات الحية من المواد الضارة)

8- What happens to organisms that cannot adapt to the conditions of their environment?



- (a) their number increases
- (b) **they cannot survive in the environment**
- (c) their number remains constant
- (d) they can persist in the environment

8- ماذا يحدث للكائنات الحية التي لا يمكنها التكيف مع ظروف بيئتها (يزداد عددها - لا يمكنها العيش في البيئة - يبقى عددها ثابت - يمكنها الاستمرار في البيئة)

9- Animals that live in a hot environment have ears to help her, and allow heat to escape to be cool.
(small - short - **long** - sharp)

9- الحيوانات التي تعيش في بيئة حارة آذانها لتساعد على التخلص من حرارة جسمها الزائدة. (صغيرة - قصيرة - حادة - طويلة)

10- Fish extracts oxygen out of the water by
(skin - **gills** - lungs - fins)

10- تستخرج الأسماك الأكسجين من الماء عن طريق (جلد - خياشيم - رئات - زعانف)

11- Stomach is a part of the digestive system that.....
(chewing food- **converts solid food into liquid** - absorbs nutrients from food - delivers food into the esophagus)

11- المعدة جزء من الجهاز الهضمي (مضغ الطعام- يحول الطعام الصلب إلى سائل- يمتص العناصر الغذائية من الطعام - يوصل الطعام إلى المريء)

12-Which of these examples of hiding or a camouflage
(camel broad feet – camel hump – power parrot wings – **the fox is golden like its environment**)

12- أي من هذه الأمثلة على الاختباء أو التمويه (الجمال عريضه قدم - سنام الجمل - باور ببيغاء اجنحة - الثعلب ذهبي مثل بيئته)

13- Eagle is bird of prey (who eats meat). Its beak is strong and sharp.
This structural adaptation helps it to
(see - **ripping meat**- find a shelter- escape)

13 - النسر من الطيور الجارحة. ومنقارها قوي وحاد. هذا التكيف الهيكلي يساعدها على (النظر - تمزيق اللحم- ابحث عن ملجأ- هروب)

2- Put (v) or (x) or the following statements:

- 1- Foxes have a strong sense of hearing. (v) 1 - لدى الثعالب حاسة سمعية قوية. (v)
- 2- The respiratory system is responsible for the entry of air into the body. (v) 2- الجهاز التنفسي مسئول عن دخول الهواء إلى الجسم. (v)
- 3- Exhaled air is loaded with oxygen (x) 3- هواء الزفير محمل بالأكسجين (x)
- 4- When running and making an effort, the number of breathing times decreases (x) 4- عند الجري والجهد يقل عدد مرات التنفس (x)
- 5- Acacia trees grow in the Amazon forest. (x) 5- تنمو أشجار الأكاسيا في غابات الأمازون. (x)
- 6- The feet of the penguin do not freeze because they have a layer of fat. (x) 6- لا تتجمد أقدام البطريق لأنها تحتوي على طبقة دهنية. (x)
- 7- The fur that some animals possess to protect them from the cold is a behavioral adaptation. (x) 7- الفراء الذي تمتلكه بعض الحيوانات لحمايتها من البرد هو تكيف سلوكي. (x)
- 8- Man cannot restore the ecosystem with any way (x) 8- لا يمكن للإنسان استعادة النظام البيئي بأي شكل من الأشكال (x)
- 9- The migration of birds to search for food is considered a form of behavioral adaptation (v) 9- تعتبر هجرة الطيور للبحث عن غذائها شكلا من أشكال التكيف السلوكي (v)
- 10- Some animals that live in cold have a long ears; To help it to maintain the body temperature (x) 10- تمتلك بعض الحيوانات التي تعيش في المناطق الباردة آذانا طويلة؛ لتساعد على الحفاظ على حرارة جسمها (x)
- 11- Plants need long roots that extend deep into the soil to survive in the water scarce (v) 11- تحتاج النباتات إلى جذور طويلة ممتدة في أعماق التربة للبقاء في البيئة نادرة المياه. (v)
- 12- Animals digging trenches is a form of structural adaptation (x) 12- حفر الحيوانات للخنادق شكل من أشكال التكيف التركيبي. (x)
- 13- Food turns from complex to simple during digestion (v) 13- يتحول الطعام من صورته المعقدة إلى البسيطة أثناء عملية الهضم (v)

Column (A)	Column (B)
1-nerves b	a- bronchioles
2-branches inside the lung that resemble tree branches a	b- carry messages to the brain via the spinal cord
3-behavioral adaptation c	c- The kapok tree emits beautiful scents to attract bats
4-vibrating motion e	d- Structural adaptation of some animals to see better at night.
5- membraned like mirror d	e- A way to communicate between some animals

Column (A)	Column (B)
1-is a common organ in the digestive and respiratory system. d	a- Carbon dioxide
2-a gas necessary for respiration. e	b- respiration of
3-the process of pushing air in and out of the body. b	c- diaphragm
4-a muscle that has an important role in the breathing process. c	d- throat(pharynx)
5-Is a gas produced by respiration a	e- oxygen

Column (A)	Column (B)
1-sight d	a-it does not absorb food.
2-camouflage b	b-a type of adaptation that helps an animal to hide.
3-esophagus a	c-ants use it to sense and communicate smells
4- diaphragm e	d-it helps us see
5-smell c	e- a muscle that plays an important role in breathing

Complete:

1- The fat layer under the animal's skin to warm it is anadaptation
(Structural - behavioral)

1- وجود الدهون تحت جلد الحيوان لتدفئته يعتبر تكيف . (تركيبى . سلوكى)

2-It causes many problems for the lungs(Breathing - **pollution**)

2- يسبب مشاكل كثيرة للرئتين (التنفس - التلوث).

3- Fish breathe gas which dissolved in water (**Oxygen** - carbon dioxide)

3- تتنفس الأسماك غازات مذابة في الماء (أكسجين - ثاني أكسيد الكربون)

4- mix and grind food inside the mouth

(Teeth only - **Teeth and tongue**)

4- يخلط ويطحن الطعام داخل الفم (الأسنان فقط - الأسنان واللسان)

5- Mangroves trees grow in.....(Fresh water - **salt water**)

5- تنمو أشجار المانجروف في (مياه عذبة - مياه مالحة)

6- During exhalation,..... gas comes out of the lung.

(Oxygen - **Carbon dioxide**)

6- أثناء الزفير ، يخرج الغاز من الرئة.(أكسجين - ثاني أكسيد الكربون)

7- The lungs are one of the important organs in thesystem. (**Respiratory** - Digestive)

7- الرئتان من الأعضاء المهمة في نظام (الجهاز التنفسي - الهضمي)

8- The diaphragm rises up during theoperation

(Inhalation - **Exhalation**)

8- يرتفع الحجاب الحاجز خلال عملية(الشهيق - الزفير)

9- The cactus plant has spines that protect it from being eaten by desert animals, and this is considered a form of(Behavioral Adaptation - **Structural Adaptation**)

9- نبات الصبار له أشواك تحميه من أكل حيوانات الصحراء ، وهذا يعتبر شكلاً من أشكال ... (التكيف السلوكي - التكيف الهيكلي)

10- A tube with muscles that help push food into the stomach, called.....
(Trachea - **Esophagus**)

10- أنبوب به عضلات تساعد على دفع الطعام إلى المعدة ، يسمى (القنبة الهوائية - المريء)

The fifth question: Answer the following:

1- Butterflies that have a color like the color of the tree they live on are called this phenomenon (**Camouflage**)

1- الفراشات التي لها لون مثل لون الشجرة التي تعيش عليها تسمى هذه الظاهرة (التمويه)

2- Rabbits have long and strong hind legs that help them to jump quickly and escape when danger determine the type of adaptation (**Structural adaptation**)

2- للارانب أرجل خلفية طويلة وقوية تساعد على القفز السريع والهروب عند الخطر يحدد نوع التكيف (التكيف التركيبي)

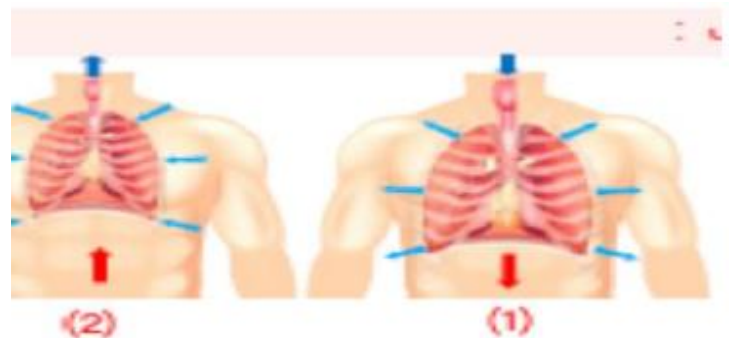
3 - Note the following two figures. Identify the name of each of the two processes in Figures 1, 2: -

1- inhalation process

2- exhalation process

What happens to the diaphragm in Figure (1).

Diaphragm move down



4-The system that digests food to produce energy is **digestive system**

4- الجهاز الذي يهضم الطعام لإنتاج الطاقة هو الجهاز الهضمي

5- Bats cannot see in the dark, but they hunt their prey at night because of **echolocation**

5- لا تستطيع الخفافيش الرؤية في الظلام ، لكنها تصطاد فريستها في الليل بسبب تحديد الموقع بالصدى

6-Chameleons can move each of their eyes in a different direction, this adaptation helps them



in catch prey – find food

6- يمكن للحرباء تحريك عيونهم في اتجاه مختلف ، وهذا التكيف يساعدهم في اصطياد الفريسة - العثور على الطعام

7- some dogs live in a cold environment, while some live in a hot environment.

In your opinion, which one has thick fur, the cold environment or the hot environment? And why?**(cold environment - to warm it)**

7- تعيش بعض الكلاب في بيئة باردة بينما يعيش البعض الآخر في بيئة حارة. برأيك أيهما لديه فرو كثيف ، البيئة الباردة أم البيئة الحارة؟ ولماذا؟

(البيئة الباردة - لتدفئتها)

8- Leaves of plants that float above the surface of the water are so wide that they can **absorb sunlight**

8- أوراق النباتات التي تطفو فوق سطح الماء واسعة جدًا بحيث يمكنها امتصاص أشعة الشمس

9- Animals that have a thick layer of fat under the skin are animals that live in a **cold** environment

9- الحيوانات التي تحتوي على طبقة سميكة من الدهون تحت الجلد هي حيوانات تعيش في بيئة باردة

أسئلة المحافطات للعام الماضي 2021



1----Choose the correct answer:

1-.....is covering the body of the Arctic fox.

- a. Heavy hair b. Heavy skin **c. Thick fur** d. Many feathers

2-are panting to lower their body temperature.

- a. Wholes b. Cats **c. Foxes** d. Bats

3- One of the behavioral adaptations that helps the animal protects itself from enemies is

- a- camouflage** b. extinction c. immigration d. reproduction

3- Adaptation includes changes that in the environment.

- a. reduce the chance of survival
b. reduce life span for individuals

c. improve species survival

- d. reduce reproduction process



4- The esophagus is a part of the digestive system that acts to

- a. chew the food
b. absorbs nutrients from the food
c. transfer food from mouth to stomach
d. transfer air to the lungs

5. Fish extracts oxygen out of water by

- a. skin b. **gills** c. Lungs d. fins

2-Complete :

1-The fatty layer under the animal's skin to warm it is considered a.....adaptation

(**structural**-behavioral)

2-mix and crush food inside the mouth..... (Teeth only-**Teeth and tongue**)

3. Fish breathe in..... gas which is dissolved in water
(**oxygen** - carbon dioxide)

4-.....destroys the lungs and causes many diseases.
(Breathing - **Pollution**)

Put a sign (v) or a sign (x) or the following statements:

1-The feet of the penguin don't freeze because they have an insulating fat layer. (**x**)

2-The thick fur that some animals possess to protect them from the cold is considers a behavioral adaptation. (**x**)

3- Penguins forming alarge groups in a structural adaptation. (**x**)

4- Plants have two types of adaptation (structural and behavioral) . (**v**)

5- Sending bad smells by Acacia tree is a behavioral adaptation . (**v**)

6- Food turns from complex form to simple during the digestion process .(**v**)

7- The food passes through the Large intestine before it goes to the small intestine. (**x**)

8- The respiratory system responsible for the entry of air into the body. (**v**)

9- During exhalation the diaphragm moves upward and relaxes. (**v**)

10- A pharynx is a common cavity between the digestive and the respiratory system. (**v**)

11- Carbon dioxide is important for the respiration of animals. (**x**)

Answer:

1-Butterflies that have the same color of the tree they live on. This is called **camouflage**

2- Some plants have thorns to defend themselves against enemies. -What is the type of adaptation? **a structural adaptation.**

Concept2



1- Choose:

1- The ability to turn the head in all directions.....
(Snakes- jerboa - dolphins -**owl**)

1- القدرة على لف الرأس في جميع الاتجاهات تتميز بها (الثعابين - اليربوع - الدلافين - البومة)

2- All of the following are components of the nervous system except
.....(Spinal cord - **heart** -nerves -brain)

2 - كل ما يلي يعتبر من مكونات الجهاز العصبي ماعدا (الحبل الشوكي - القلب - الأعصاب - الدماغ)

3- When you put your hand on a hot surface, the brain sends a message to the muscles, your action is

- (a) Keep placing your hand
- (b) You feel pain
- (c) You will do nothing
- (d) **pull your hand away from a hot object**

3- عند وضع يدك على سطح ساخن، يرسل المخ رسالة إلى العضلات والفعل الذي يصدر منك بعدها مباشرة هو . (أ) تستمر في وضع يدك (ب) تسحب يدك بعيدا عن جسم ساخن (ج) لن يصدر منك اي فعل (د) تشعر بالألم

4-When you determine a sweet or bitter taste, you have used
(**the tongue** -the eye- the ear - the nose)

4- عندما تحدد مذاق حلو أو مر، فإنك قد قمت باستخدام (اللسان - العين - الأذن - الأنف)

5- The sense you use to identify the scent of a perfume.

(taste -sight- **smell**-hearing)

5- الحاسة التي تستخدمها للتعرف على رائحة العطر(التذوق- البصر - الشم - السمع)

6- Your sensation of hot weather depends on sensory receptors in the
(eyes - **skin** - nose – ears)

6- إحساسك بالطقس الحار يعتمد على المستقبلات الحسية في (العيون - الجلد - الأنف - الأذنين)

7- Sameh drives his bike, and during that he heard a car behind him and moved away so as not to collide with it, the device that received A sign that made Sameh realize that is

(a) the nervous system

(b) the respiratory system

(c) the digestive system

(d) the circulatory system

7- يقود سامح دراجته وأثناء ذلك سمع سيارة خلفه فابتعد حتى لا يصطدم بها، الجهاز الذي استقبل إشارة جعلت سامح يدرك ذلك هو
(الجهاز العصبي - الجهاز التنفسي - الجهاز الهضمي - الجهاز الدوري)

8 – what carries the message from your eyes to your brain when you see something...

(**nerves** - muscle - veins - glands)

8 - ما الذي يحمل الرسالة من عينيك إلى دماغك عندما ترى شيئاً... (أعصاب - عضلات - أوردة - غدد)

9-Thesystem helping us to translate messages that come from our surroundings, such as smells and sounds.

(respiratory - digestive - **nervous** - circulatory)

9 -يساعدنا نظام على ترجمة الرسائل التي تأتي من محيطنا مثل الروائح والأصوات.(الجهاز التنفسي - الهضمي - العصبي - الدوراني)

2- Put (v) or (x) or the following statements:

1-The ear is the sense organ responsible for seeing objects(x)

1- الأذن هي العضو الحسي المسؤول عن رؤية الأشياء (x).

2- The brain responsible for processing information (v)

2- الدماغ المسؤول عن معالجة المعلومات (v)

3- Bats use their sense of smell to avoid dangers. (x)

3- تستخدم الخفافيش حاسة الشم لتجنب الأخطار. (x)

4- Dolphins have a strong sense of sight (x)

4- تتمتع الدلافين بإحساس قوي بالرؤية (x)

5-Snakes have the ability to rotate their heads in all directions(x)

5- الأفاعي لها القدرة على تدوير رؤوسها في كل الاتجاهات (x).

6- A person can identify food which is not good through the sense of hearing.
(x)

6- يمكن للإنسان أن يتعرف على الطعام غير الجيد من خلال حاسة السمع. (x)

7- Bees can know the sweet taste by their sense of smell (x)

يستطيع النحل التمييز بين الطعم الحلو والمر عن طريق حاسة الشم(x)

8- The nervous system works separately from the five senses. (x)

8- يعمل الجهاز العصبي بشكل منفصل عن الحواس الخمس(x)

9- Seeing with our eyes is a way to help us gather information about the environment around us. (√)

9- الرؤية بأعيننا وسيلة تساعدنا في جمع معلومات عن البيئة المحيطة بنا(√)

10- The skin is the sensory organ that makes you feel the smooth of the cloth (√)

10- الجلد هو العضو الحسي الذي يجعلك تشعر بنعومة القماش(√)

11- Plants have two types of adaptation (structural and behavioral) (√)

11- العيون من الأعضاء الحسية التي تجعلك تشعر بمرارة الليمون(√)

Column (A)	Column (B)
1-It is similar in its processing of information to a computer. <u>c</u> 2-when a foreign object is brought into your eyes <u>d</u> 3-when an object falls from your hands. <u>b</u> 4-the transmission of commands to the muscles to contract <u>a</u>	a- The spinal cord b- Using the sense of sight c- The brain d- The reflex action occurs

1) Column (A)	Column (B)
1-light <u>d</u> 2-owl <u>c</u> 3-the snake <u>a</u> 4-the bat <u>b</u> 5-mirror- like membrane <u>e</u>	a-it depends on the body's sense of heat for predation b-it depends on the echo of the sound in locating the prey. c-An animal with a bowl- like face and strong senses of hearing and vision. d-it is the visible form of energy that is transmitted in the form of waves. e-A structural adaptation in the eye that provides some animals with better vision at night. f- A sense that helps us hear birds

Complete:

1- The time taken for the body to receive information from the environment.....(Reflex action - **Response time**)

1- الوقت الذي يستغرقه الجسم لتلقي المعلومات من البيئة (رد الفعل المنعكس - زمن الاستجابة)

2- An animal that can escape from enemies because of the length of its hind leg. (Arctic fox - **jerboa**)

2- حيوان يستطيع الهروب من الأعداء بسبب طول رجله الخلفية (الثعلب القطبي - اليربوع)

3- The eye sends messages to through the nerves (**Brain** - spinal cord)

3- ترسل العين رسائل إلى عن طريق الأعصاب (الدماغ - الحبل الشوكي)

4- The dolphin can locate its prey through its sense.....(**hearing** - sight)

4- يستطيع الدلفين تحديد موقع فريسته من خلال حاسته (السمع - البصر)

5- The echo sound feature depends on (**Hearing sense** - Sight sense)

5- تعتمد خاصية صدى الصوت على (حاسة السمع - حاسة البصر)

6- The skin is an important organ of the system... (Respiratory - **Nervous**)

6- الجلد عضو مهم في الجهاز... (الجهاز التنفسي - العصبي)

7- The spinal cord is an important organ of thesystem (**Nervous** - Digestive)

7- النخاع الشوكي عضو مهم في جهاز (عصبي - هضمي)

8- Sensory organs such as the nose and ear receive information from the surrounding environment and convert it to (Nutrients - **Nerve signals**)

8- الأعضاء الحسية مثل الأنف والأذن تستقبل المعلومات من البيئة المحيطة وتحولها إلى (العناصر الغذائية - الإشارات العصبية)

9- In order for the human being to remain alive, there is an integration between the senses and thesystem to interact with the surrounding environment .

(Respiratory - **Nervous**)

9- من أجل بقاء الإنسان على قيد الحياة ، هناك تكامل بين الحواس ونظام للتفاعل مع البيئة المحيطة.
(الجهاز التنفسي - العصبي)

The fifth question: Answer the following:

1- A dolphin can locate living organisms and things under the surface of the water and explain the feature that helps the dolphin to do (**echolocation**)

1- يستطيع الدلفين تحديد موقع الكائنات الحية والأشياء تحت سطح الماء وشرح الميزة التي تساعد الدلفين على القيام به

2- There are some nocturnal animals that depend on their sense of heat to get their prey (**snake**)

2- هناك بعض الحيوانات الليلية التي تعتمد على إحساسها بالحرارة للحصول على فريستها (الثعابين).

8- Snakes depend on identifying their prey and catching them at night by sensing heat. Determine the reason
(**as it is not seen at night**)

8- تعتمد الثعابين على تحديد فرائسها واصطيادها ليلاً باستشعار الحرارة. حدد السبب

أسئلة المحافظات للعام الماضي 2021

1-Choose:

1-The organ which is responsible for smelling sense

- a-ear b-tongue **c-nose** d eye

2-To communicate through the sense of sight we need

- a- making sound **b. availability of light**
c. hearing music d. touching something

3-Bats are.....animals.

- a. nocturnal** b. morning c. not hearing d. not flying

4-The animal that has the ability to turn its head in all direction is a/an

- a. snake b. jerboa c. dolphin **d. owl**

5. All the following components are from the nervous system except

- a. spinal cord **b. heart** c. nerves d. brain

6-Theis the main control center in your body.

- a. nerve **b. brain** c. spinal cord d. sense

7-The system helps us translate messages that come from our surroundings, such as smells and sounds.

- a. respiratory b. digestive **c. nervous** d circulatory

8- When an object comes suddenly close to your eyes..... occurs

- a.reflex action** b. respiration c. sensory organ d. sleeping

2-Choose between brackets:

1-In order for human to remain, there must be an integration between the senses and the System to interact with the surrounding environment.
(respiratory-**nervous**)

2-The eyes send messages to the..... through the nerves.
(**brain** - spinal cord)

3- Sensory receptors send..... (a message from the brain to the muscles-**a message from the sensory organs to the brain**)

4- The time that the body takes to receive information from the environment and (**reaction time**-reflex action)

3-Put (**v**) or (**x**) or the following statements:

1-The age is the sensory organ that makes you feel the smoothness of cloth. (**x**)

2- Foxes have a strong hearing sense. (**v**)

3- Bats use their sense of smell to avoid danger. (**x**)

4- Dolphins have a strong sight sense. (**x**)

5- A person can identify spoiled food through the touch sense. (**x**)

6- Echo helps dolphins locate their preys. (**v**)

7- Snakes have the ability to rotate their heads in all directions. (**x**)

8- The brain is responsible for processing information. (**v**)

9- The nervous system plays a role in breathing . (**x**)



4-Answer the following questions:

A) There are some nocturnal animals that depend on sensing heat to get their prey

Explain with example.

(A) Snakes have specialized body parts in their face that allow them detect the heat of the warm blooded preys at night.

B) Dolphins can Locate organisms and things under the surface of water.

Explain the feature that helps dolphins to do so.

(B) They depend on echolocation .

(c) Rabbits have strong and long hind legs that help them jump quickly and escape in

dangerous times. Determine the type of adaptation.

c) Structural adaptation

Concept 3

1- Choose:

1-The organ responsible for the sense of sight

(the ear - the tongue - the nose - **the eye**)

2- العضو المسئول عن حاسة البصر (الأذن- اللسان- الأنف- العين)

2-energy affects on sensory receptors in the eye, causing a vision.

(Sound - Kinetic - **Light** – Magnetic)

3-الطاقة.... تؤثر على المستقبلات الحسية في العين فتسبب الاحساس بالرؤية(الصوتية - الحركية- الضوئية- المغناطيسية)

3-Each of the following is considered a source of light except

(the fire - the sun - the lamp- **the eye**)

3-كل مما يلي يعتبر مصدر للضوء ماعدا... (النار - الشمس- المصباح – العين)

4- There is a tapetum lucidum in all of the following except (the horse -

the cat - **the human** - the dog)

4 - يوجد البساط الشفاف في كل مما يأتي ماعدا (الحصان- القطه - الانسان- الكلب)

5- Which of the following is a source of light?

(Eye - The moon - **Fire** – Mirror)

5 - أي مما يلي هو مصدر ضوء؟(العين - القمر - النار - المرآة)

6- Our eyes help us see what's around us. What is the organ responsible for perceiving what we see with our eyes?

(The lungs– The esophagus- The stomach- **The brain**)

6- أعيننا تساعدنا على رؤية ما حولنا. ما هو العضو المسئول عن إدراك ما نراه بأعيننا؟ (الرئتان- المريء- المعدة- الدماغ)



2-Put (v) or (x) or the following statements:

5- The moon is a source of light. (x)

5- القمر مصدر نور.

6- Both humans and animals need a source of light to see (v)

6- يحتاج كل من البشر والحيوانات إلى مصدر ضوء لرؤية (v)

7- Nocturnal animals have eyes that are larger than the human eye. (v)

7- الحيوانات الليلية لها عيون أكبر من عين الإنسان. (v)

8- Some animals can see at night, such as a wild cat (v)

8- بعض الحيوانات تستطيع الرؤية بالليل مثل قطة بريا (v)

9- Human has a tapetum lucidum in his eye to help him see at night (x)

9- يمتلك الإنسان البساط الشفاف في عينه لتساعده على الرؤية في الليل

3-Complete :

1- Cats' eyes are adapted to night vision due to the presence of ..(behind their eyes(Tapetum lucidum-wide eyes)

1- عيون القطط تتكيف مع الرؤية الليلية لوجود خلف أعينهم

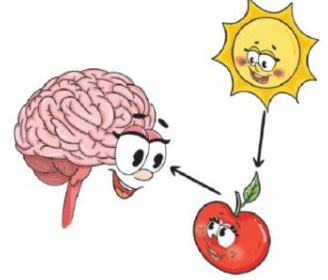
2- When light falls on an object and the light....., we can see this object.

(refracts - reflects)

2- عندما يسقط الضوء على الجسم والضوء ، يمكننا رؤية هذا الشيء. (ينعكس - ينكسر)

4-Answer the following:

- 1- Some animals have the ability to see in the dark because of **Tapetum lucidum**
- 2- Complete after noticing the following figure - What happens until you see this apple?
- 3-The light falls on the **apple** then it is reflected on the eyes
- so the eyes transmit the message to **the brain** then he interprets it and translates it, so we see the apple.



- 2- أكمل بعد ملاحظة الشكل التالي - ماذا سيحدث حتى ترى هذه التفاحة؟
- 3- يسقط الضوء على التفاحة ثم ينعكس على العينين فتنتقل الرسالة إلى المخ ثم يفسرها ويترجمها فنرى التفاحة.
- 4- I saw an eye shining in the dark, this animal could be **(cat (nocturnal animal))**
- 4- رأيت عين تلمع في الظلام هذا الحيوان يمكن أن يكون (قطه (حيوان ليلي))



الأوراق مقدمه مجانا من

01010705572

جروب منتدى العلوم والساينس easy science ميس زينب عبدالعزيز



October Revision

Mr. Ahmed Elbasha

★(1) Choose the right answer :

1. The presence of an insulating layer of , keep the penguin 's body warm.

- a. protein and thick downy feathers
- b. fat and thin downy feathers
- c. fat and thick downy feathers
- d . protein and thin downy feathers

2. Camouflage means that the animal

- a. can be seen easily among its surrounding.
- b. is hard to be seen among its surrounding.
- c. is easily to be seen by its preys.
- d. can be seen easily by its predators.

3. When we wear heavy clothes in winter, this is considered as a type of

- a. adaptation for cold weather.
- b. camouflage.
- c. adaptation for hot weather.
- d. ecosystem.

4. The color of fur of fennec foxes protects them from

- a. wind.
- b. rains.
- c. hot Sun.
- d. cold weather.

5. Bull sharks can live in

- a. fresh water only.
- b. salt water only.
- c. seas, rivers and mud.
- d. rivers, seas and oceans.

6. is considered as a behavioral adaptation in the panther chameleon.

- a. Puffing up its body during danger
- b. Each eye can move independently
- c. V-shaped feet
- d. Long sticky tongue

7. From the behavioral adaptation of acacia tree is that.....

- a. it has one very long root.
- b. it has sharp spines among its leaves.
- c. it has very tall trunk.
- d. it is producing poison to make a bad tasty leaves.

8. The acacia tree warning the other nearby acacia trees from animals by sending

- a. a watery message in the air.
- b. a watery message in the water.
- c. a smelly message in the air.
- d. a smelly message in the water.

9. Barbary fig keeps animals away like acacia trees by its

- a. sharp spines.
- b. poison.
- c. smell.
- d. long leaves.

10. The needed energy to perform different functions of a living organism is obtained from

- a. breathing only.
- b. food processing only.
- c. breathing and running.
- d. breathing and food processing.

11. All the following are organs in the digestive system except

- a. mouth.
- b. nose.
- c. stomach.
- d. esophagus.

12. The stomach lies between esophagus and

- a. mouth.
- b. large intestine.
- c. small intestine.
- d. anus.

13. Which of the following organs is not included in breaking down of food?

- a. Mouth.
- b. Stomach.
- c. Lungs.
- d. Small intestine.

14. Crushing the food in your mouth is a function of

- a. stomach.
- b. tongue.
- c. saliva.
- d. teeth.

15. In the, saliva moistens food and begins to break it down.

- a. mouth
- b. esophagus
- c. small intestine
- d. stomach

16. The organ that moves the food into the stomach is

- a. mouth.
- b. tongue.
- c. esophagus.
- d. small intestine.

17. The food passes from the stomach to in order to complete the digestion process.

- a. esophagus
- b. small intestine
- c. large intestine
- d. anus

18. The undigested materials of the food pass from the small intestine into

- a. the liver.
- b. the pancreas.
- c. the brain.
- d. the large intestine.

19. In the large intestine is absorbed from the undigested food.

- a. starch
- b. fats
- c. water
- d. oil

20. The solid wastes of undigested food become useless to the body, so the body must expel it outside the body through the

- a. mouth.
- b. small intestine.
- c. large intestine.
- d. anus.

21.The following pieces of advice keep the digestive system healthy except

- a. chewing food well.
- b. avoid eating much fast meals.
- c. drinking a little amount of water.
- d. practicing sports regularly.

22.The oxygen gas moves from air into blood at the

- a. nose.
- b. throat.
- c. trachea.
- d. lungs.

23.Changes that occur slowly to the environment,

- a. cause many organisms to die.
- b. cause many organisms to respire.
- c. cause many organisms to disappear.
- d. give a chance to the organisms for adaptation.

24.Human can negatively affect the nature by all of the following activities, except

- a. cutting down forests.
- b. throwing wastes in waterways.
- c. plowing grasslands.
- d. removing air pollutants .

25.Human activities and bad habits can pollute of an ecosystem.

- a. air and soil only
- b. soil and waterways only
- c. air and waterways only
- d. air, soil and waterways

26.The sensory organs of a dolphin help it do all of the following, except

- a. surviving.
- b. searching for food.
- c. searching for water.
- d. protecting itself under water.

27.To describe the delicious taste of a piece of chocolate, we should use the sense of

- a. sight.
- b. smell.
- c. taste.
- d. touch.

28.To describe color of your school bag to your friend, you should use the sense of

- a. sight.
- b. smell.
- c. taste.
- d. touch.

29.Which of the following senses we use during watching a film on the T.V?

- a. Sight and taste.
- b. Sight and smell.
- c. Hearing and touch.
- d. Sight and hearing.

30.The five senses of humans include

- a. sight, hearing, touch, smell, and movement.
- b. sight, movement, taste, touch, and smell.
- c. taste, touch, movement, hearing, and smell.
- d. sight, hearing, taste, smell, and touch.

31.To know if a cup of water is hot or cold, we need to use the sense of

- a. sight.
- b. hearing.
- c. smell.
- d. touch.

32.We can distinguish between water and milk through

- a. taste and hearing.
- b. sight and hearing.
- c. smell and hearing.
- d. taste and sight.

33.Both the spinal cord and nerves

- a. are located in the backbone.
- b. are located in the small intestine.
- c. transmit messages from the brain to all parts of the body only.
- d. transmit messages from the brain to all parts of the body and vice versa.

34.All of the following are sensory organs except the

- a. eyes.
- b. nose.
- c. skin.
- d. lungs.

35.The nerves transmit information from and to the brain in the form of

- a. magnetic impulses.
- b. electrical impulses.
- c. light impulses.
- d. sound impulses.

36.The organ that processes the information collected through the sense of sight is

- a. the spinal cord .
- b. the nerves.
- c. the brain.
- d. the eyes.

37.The system responsible for moving your hand away from danger, such as touching a hot cup of tea, is the system.

- a. digestive
- b. respiratory
- c. nervous
- d. urinary

38.The organ responsible for the sense of sight

- a. the ear.
- b. the tongue.
- c. the nose
- d. the eye.

39.One of behavioral adaptations that help the animal protect itself from enemies

- a. blend in
- b. extinction
- c. immigration
- d. reproduction

40.The ability to turn the head in all directions ,

- a. Snakes b. jerboa c. dolphins d. owl

41.-Bat is animal.

- a. nocturnal b. morning c. Harmful d. don't fly

42..... energy affects on sensory receptors in the eye, causing a vision.

- a. Sound b. Kinetic c. Light d. Magnetic

43.All of the following are components of the nervous system except

- a. Spinal cord b. heart c. nerves d. brain

44..... is covering body arctic fox

- a. heavy hair b. heavy skin c. thick fur d. many feathers

45.When you determine a sweet or bitter taste, you have used

- a. the tongue b. the eye c. the ear d. the nose

46.Your sensation of hot weather depends on sensory receptors in the

- a. eyes b. skin c. nose d. ear

47.The light-reflecting materials like

- a. wood b. mirrors c. plastic d. paper

48.What is adaptation?

- a. The process by which new species appear.
b. Feature owned by living things to help them survive.
c. A form of pollination for trees.
d. A process of getting rid of harmful substances in living things.

49.Animals that live in a hot environment have ears to help her, and allow heat to escape to be cool.

- a. small b. short c. long d. sharp

50.Which of the following allows pass the light through it?

- a. a rock b. moon c. wood d. glass

51.Surface that regularly reflects light

- a. smooth and shiny b. dark with impurities
c. transparent and clean d. rough and dark

52.what carries message from your eyes to your brain when you see something

- a. nerves b. muscle c. veins d. glands

53. Stomach is a part of the digestive system that

- a. chewing food.
- b. converts solid food into liquid
- c. absorbs nutrients from food.
- d. delivers food into the esophagus.

54. Eagle is bird of prey (who eats meat). Its beak is strong and sharp. This structural adaptation helps it to

- a. see.
- b. ripping meat
- c. find a shelter.
- d. escape.

55. The system helping us to translate messages that come from our surroundings, such as smells and sounds.

- a. respiratory
- b. digestive
- c. nervous
- d. circulatory

☀(2) Put (√) or (X)

- | | |
|---|--------|
| 1. Chameleon uses its tail and V-shaped feet to hunt and move | () |
| 2. Water lily has wide leaves to absorb a large amount of sunlight. | () |
| 3. Animals can't eat barbary fig due to its sharp spines. | () |
| 4. The human body gets oxygen gas from food. | () |
| 5. Mouth, nose, esophagus and the stomach are from organs of the digestive system. | () |
| 6. The food passes through the large intestine before it goes into the small intestine. | () |
| 7. Digestion process begins in stomach with the help of saliva. | () |
| 8. Tongue and teeth moisten food, while saliva crushes the food until it becomes soft. | () |
| 9. Food passes from mouth to stomach through a tube known as small intestine. | () |
| 10. Food usually stays in stomach for few hours until it becomes a soupy liquid | () |
| 11. Swallowing food without chewing keeps the digestive system healthy | () |
| 12. Digestive system ends by anus. | () |
| 13. During running the rate of breathing decreases. | () |
| 14. The air travels down into the lungs through esophagus. | () |
| 15. Inhaled air is rich in carbon dioxide gas, while exhaled air is rich in oxygen gas. | () |
| 16. Exposing to air rich in dust harms the respiratory system. | () |
| 17. As human needs clean water to drink, fish needs clean air to breathe. | () |
| 18. Organisms have no chance to adapt, if the environmental changes are rapidly. | () |
| 19. Pollution is one of the most dangerous problems, that affect all living organisms. | () |
| 20. The sense of smell is super in all animals | () |
| 21. The response to a danger begins with sensory receptors. | () |
| 22. The ear is the sense organ responsible for seeing objects. | () |
| 23. The brain responsible for processing information | () |
| 24. The moon is a source of light. | () |
| 25. The respiratory system is responsible for the entry of air into the body. | () |
| 26. Bats use their sense of smell to avoid dangers | () |
| 27. Dolphins have a strong sense of sight. | () |

- | | |
|--|--------|
| 28.Exhaled air is loaded with oxygen. | () |
| 29.Both humans and animals need a source of light to see | () |
| 30.Wood is a transparent object that allows light to pass through it | () |
| 31.Nocturnal animals have eyes that are larger than the human eye. | () |
| 32.Some animals can see at night, such as a wild cat | () |
| 33.Man cannot restore the ecosystem with any way | () |
| 34.Human has a tapetum lucidum in his eye to help him see at night | () |
| 35.Animals digging trenches is a form of structural adaptation | () |
| 36.Food turns from complex to simple during digestion | () |
| 37.The nervous system works separately from the five senses. | () |
| 38.The skin is the sensory organ that makes you feel the smooth of the cloth | () |
| 39.Plants have two types of adaptation (structural and behavioral) | () |

✱ (3) Write the scientific term:

- 1) A property that helps animals to blend in with their surrounding Environment (.....)
- 2) The organ where saliva moistens the food (.....)
- 3) It presents in mouth and play an important role in crushing of food (.....)
- 4) Liquid substance in your mouth that moistens the bite of food and begins to break it down (.....)
- 5) A process through which the body gets oxygen from the air and expels out carbon dioxide (.....)
- 6) A large muscle that contracts during breathing in and relaxes during breathing out (.....)
- 7) A structure that allows fish to breathe under water (.....)
- 8) A gas that presents in air and water and is very important for breathing process. (.....)
- 9) The environment in which fish live, and as it is clean the fish stay healthy. (.....)
- 10) An organ that is responsible for breathing and contains little sacs, in humans, frogs, cows but not in fish. (.....)
- 11) A property related to the bouncing back of sound to the dolphin when the sound waves hit objects under water (.....)
- 12) The organ used to differentiate between different colors (.....)
- 13) The organ used to differentiate between different types of food (.....)
- 14) The organ used to differentiate between different scents. (.....)
- 15) The sense used to differentiate between smooth and rough surfaces (.....)
- 16) A system that controls all the body functions, and nerves are one of its parts. (.....)
- 17) An organ composed of a group of nerves located in the backbone, and sends messages from and to the brain (.....)

- 18) They include the eyes, nose, ears, tongue, and skin, and they receive information from the surroundings and send it to the brain (.....)
-
- 19) A type of nerves in the sensory organs that is responsible for receiving information from the environment (.....)
-
- 20) The time taken by an organism's body to respond to different reactions around it (.....)
-
- 21) A system that works inside the human body such that it keeps the organism away from danger (.....)
-
- 22) The organ which receives and processes the messages sent from the sensory receptors that are found in a jerboa's ears. (.....)
-
- 23) An organ in the human body that can distinguish between the smell of vinegar and perfume. (.....)
-
- 24) A sense by which you can recognize the sour taste of lemon (.....)
-

★(4) Complete the following:

1. Among animals that can live in polar environment are and
2. Among animals that live in hot environments are foxes, while
foxes live in cold environments
3. Different colors in bull shark's body is considered adaptation
4. Among the plants that can survive in habitats that have leakage of water are,
..... and
5. The human body use system to get nutrients from food and use
system to get oxygen from air.
6. Air enters and exits the human body through system
7. The system which is responsible for moving your hand away when you touch a cup of
hot water is the system
8. From the opaque objects
9. The eye sends messages to through the nerves
10. The fat layer under the animal's skin to warm it is an adaptation
11. Cats' eyes are adapted to night vision due to presence of behind their eyes
12. The dolphin can locate its prey through its sense.....
13. Fish breathe gas which dissolved in water
14. The echo sound feature depends on Sense
15. During exhalation, gas comes out of the lung.
16. The lungs are one of the important organs in the system.
17. The spinal cord is an important organ of the system

✱(5) Choose from column (B) what suits it in column (A) :

1

(A)	(B)
1-Light	a- it depends on the body's sense of heat for predation
2-Owl	b- it depends on the echo of the sound in locating the prey.
3-The snake	c- An animal with a bowl- like face and strong senses of hearing and vision.
4-The bat	d- it is the visible form of energy that is transmitted in the form of waves.
5-Mirror- like membrane	e- A structural adaptation in the eye that provides some animals with better vision at night.
	f- A sense that helps us hear birds.

2

(A)	(B)
1-is a common organ in the digestive and respiratory system.	a- Carbon dioxide
2-a gas necessary for respiration.	b- respiration of
3-the process of pushing air in and out of the body.	c- diaphragm
4-a muscle that has an important role in the breathing process.	d- throat(pharynx)
5 - Is a gas produced by respiration.	e- oxygen

3

(A)	(B)
1- nerves	a- bronchioles
2- branches inside the lung that resemble tree branches	b- carry messages to the brain via the spinal cord.
3- behavioral adaptation	c- The kapok tree emits beautiful scents to attract bats
4- vibrating motion	d- Structural adaptation of some animals to see better at night.
5- mirror- like membrane	e- A way to communicate between some animals

✳(6) TRY TO ANSWER:

1. Look at the opposite figure, then answer the following questions:

a. Give two examples of animals that live in this habitat.

.....

.....

b. Give two examples of plants that live in this habitat.

.....

.....



c. Put (✓) or (X):

1. Plants of this habitat are characterized by having long, thick roots. ()
2. Plants of this habitat have large, wide leaves. ()

2. Choose from column (A), what suits it in column (B) and (C) :

Species	Habitat	Way of breathing
1. Lizard	A. Polar region	a. Take in oxygen from air.
2. Fish	B. Desert	b. Take in oxygen from water.
3. Penguin	C. Water	c. Take in oxygen from air and water.

1. → 2. → 3. →

3. Write one animal and one plant that live in each environment of the following:

Environment	Animal	Plant
1. Desert :
2. Rainfall forest :
3. Polar reigon :
4. Salt water :

4. Observe the following figure, then choose the correct answer :

1. Arrow number (1) represents

- a. sound waves produced by the dolphin.
- b. the echo bounced back from the rocky object.
- c. light waves produced by the dolphin.
- d. light waves produced by the rocky object.

2. Arrow number (2) represents

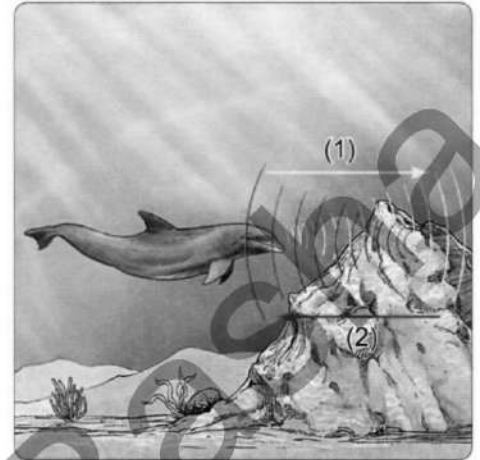
- a. sound waves produced by the dolphin.
- b. the echo bounced back to the dolphin.
- c. light waves produced by the dolphin.
- d. light waves bounced back to the dolphin.

3. The dolphin uses this property to

- a. see objects underwater.
- b. see objects above the water surface.
- c. locate objects and living organisms on the beach.
- d. locate objects and living organisms under water.

4. The sense used by the dolphin in this picture is the

- a. smell.
- b. taste.
- c. hearing.
- d. sight.



5. Look at the opposite figure that shows the structure of the human nervous system, then answer the questions:

1. Which part spreads all around the human body ?

.....

.....

2. Which part is found inside the backbone of the human body ?

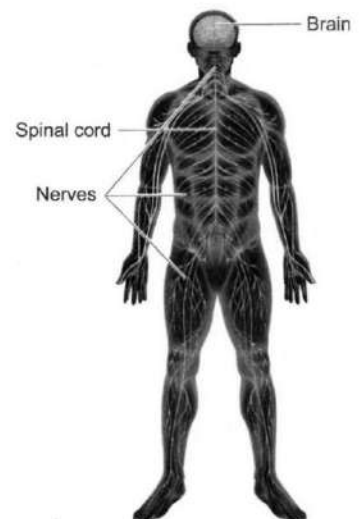
.....

.....

3. Which part represents the main control center in the human body ?

.....

.....



6. Look at the opposite figure, then answer the questions below:

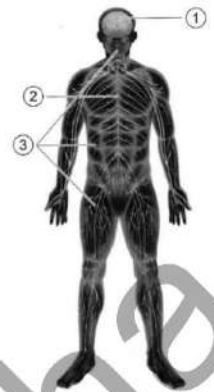
- What does the figure represent?

- Label the figure:

1. -----

2. -----

3. -----



Complete:

1. Number (-----) is found inside the backbone of the human body.
2. Number (-----) represents the main control center in the human body.
3. Number (-----) spreads all around the human body parts.

7. Choose from column (B) what suits it in column (A) :

(A)	(B)
1. Sensory receptors	a. It is the main control centre in an animal body.
2. Nerves	b. They are electrical impulses that reach the brain.
3. Brain	c. It is found in the backbone and transmit messages from and to the brain.
4. Spinal cord	d. They are found on the sensory organs, and the first to sense the surrounding environment.
	e. They receive information from the sensory receptors.

1.

2.

3.

4.

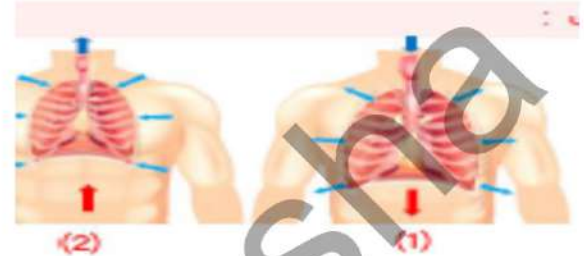
8. A dolphin can locate living organisms and things under the surface of the water and explain feature that helps the dolphin to do so

9. Note the following two figures. Figures 1, 2: -

A. Identify the name of each of the two processes in

1.

2.



B. What happens to the diaphragm in Figure (1).

.....

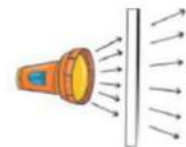
10. Look at the path of the light rays in pictures (A) - (B).

Determine which of the two objects is opaque and which is transparent

.....
.....



(B)



(A)

Model Answer

*(1) Choose the right answer :

1. C	9. A	17. B	25. D	33. D	41. A	49. C
2. B	10. D	18. D	26. C	34. D	42. C	50. D
3. A	11. B	19. C	27. C	35. B	43. B	51. A
4. C	12. C	20. D	28. A	36. C	44. C	52. A
5. D	13. C	21. C	29. D	37. C	45. A	53. D
6. A	14. D	22. D	30. D	38. D	46. B	54. B
7. D	15. A	23. D	31. D	39. A	47. B	55. C
8. C	16. C	24. D	32. D	40. D	48. B	

*(2) Put (✓) or (X)

1. (✓)	7. (X)	13. (X)	19. (✓)	25. (✓)	31. (✓)	37. (X)
2. (✓)	8. (X)	14. (X)	20. (X)	26. (X)	32. (✓)	38. (✓)
3. (✓)	9. (X)	15. (X)	21. (✓)	27. (X)	33. (X)	39. (✓)
4. (X)	10. (✓)	16. (✓)	22. (X)	28. (X)	34. (X)	
5. (X)	11. (X)	17. (X)	23. (✓)	29. (✓)	35. (X)	
6. (X)	12. (✓)	18. (✓)	24. (X)	30. (X)	36. (✓)	

*(3) Write the scientific term:

1. Camouflage.	7. Gills	13. Tongue.	19. Sensory receptors
2. Mouth.	8. Oxygen gas	14. Nose.	20. Reaction time
3. Teeth.	9. Water	15. Touch.	21. Nervous system
4. Saliva.	10. lungs.	16. Nervous system.	22. Brain
5. Respiration.	11. Echolocation.	17. Spinal cord.	23. Nose.
6. Diaphragm.	12. Eyes.	18. Sense organs.	24. Taste

*(4) Complete the following:

1. penguin - polar bear	6. Respiratory	12. Hearing
2. fennec - arctic	7. nervous	13. Oxygen
3. structural	8. Wood or carton	14. Hearing
4. acacia tree - Palm tree	9. Brain	15. Carbon dioxide
- barbary fig plant.	10. Structural	16. Respiratory
5. digestive - respiratory	11. Tapetum lucidum	17. Nervous

*(5) Choose from column (B) what suits it in column (A) :

1				
1- d	2- c	3- a	4- b	5- e
2				
1- d	2- e	3- b	4- c	5- a
3				
1- b	2- a	3- c	4- e	5- d

☀(6) TRY TO ANSWER:

1	(A) Starred agama lizard and fennec Fox. (B) Palm tree and barbary fig plant. (C) 1. (✓) 2. (✗)	6	<ul style="list-style-type: none"> The nervous system. ① Brain. ② Spinal cord. ③ Nerves. 1. (2) 2. (1) 3. (3)
2	1. B → a 2. C → b 3. A → a	7	1. d 2. e 3. a 4. c
3	1. Animal → starred agama. plant → Barbary fig 2. Animal → panther chameleon plant → kapok tree 3. Animal → penguin plant → pine tree 4. Animal → Bull shark plant → Mangrove tree	8	Echolocation
4	1. a. 2. b 3. d 4. c.	9	A : 1 – Inhalation 2 – Exhalation B : Contract
5	1. Nerves. 2. Spinal cord. 3. Brain.	10	Object (A) : Transparent Object (B) : Opaque

EL MOTAMYEZ - SCIENCE Questions Bank

REVISION on unit 1 & 2

QUESTION 01

Choose the correct answer

Camouflage means that the animal.....

- ① ☐ a can be seen easily among its surrounding ☐ b is hard to be seen among its surrounding ☐ c is easily to be seen by its preys ☐ d can be seen easily by its predators

The liver and pour their juices into the small intestine

- ② ☐ a throat ☐ b esophagus ☐ c large intestine ☐ d pancreas

Bat is.....animal

- ③ ☐ a nocturnal ☐ b morning ☐ c Harmful ☐ d don't fly

Saliva in the mouth makes the food becomes soft and mushy with the help of ...

- ④ ☐ a teeth only ☐ b tongue only ☐ c teeth and esophagus ☐ d teeth and tongue

The roots of palm plants help them to

- ⑤ ☐ a Stand strong against the wind ☐ b reach the underground water ☐ c Fixation of plants in the soil ☐ d all the above

When can object comes suddenly close to your eyes..... occurs

- ⑥ ☐ a reflex action ☐ b respiration ☐ c sensory organ ☐ d sleeping

Animals that live in a hot environment have ears to help her, and allow heat to escape to be cool.

- ⑦ ☐ a small ☐ b short ☐ c long ☐ d sharp

Theis the main control center in your body.

- ⑧ ☐ a nerve ☐ b brain ☐ c spinal cord ☐ d sense

Which of these examples of hiding or a camouflage

- ⑨ ☐ a camel broad feet ☐ b camel hump ☐ c power parrot wings ☐ d the fox is golden like its environment

The animal that has the ability to turn its head in all direction is a/an

- ⑩ ☐ a snake ☐ b jerboa ☐ c dolphin ☐ d owl

.....is covering the body of the Arctic fox.

- ⑪ ☐ a Heavy hair ☐ b Thick fur ☐ c Many feathers ☐ d Heavy skin

To communicate through the sense of sight we need

- ⑫ ☐ a making sound ☐ b availability of light ☐ c hearing music ☐ d touching something



Adaptation includes changes that in the environment.

- 13 ☐ a reduce the chance of survival ☐ b reduce life span for individuals ☐ c improve species survival ☐ d reduce reproduction process

The sense you use to identify the scent of a perfume.

- 14 ☐ a taste ☐ b sight ☐ c smell ☐ d hearing

Panting of fennec fox belongs to.....adaptation

- 15 ☐ a only structural ☐ b only behavioral ☐ c both structural and behavioral ☐ d neither structural nor behavioral

All of the following are components of the nervous system except

- 16 ☐ a Spinal cord ☐ b heart ☐ c nerves ☐ d brain

One of the structural adaptations of water lily plant is that

- 17 ☐ a it has long roots ☐ b it has sharp spines ☐ c it has tiny leaves ☐ d it has wide leaves

Fish extracts oxygen out of water by

- 18 ☐ a skin ☐ b gills ☐ c Lungs ☐ d fins

Your sensation of hot weather depends on sensory receptors in the

- 19 ☐ a eyes ☐ b skin ☐ c nose ☐ d ears

.....are panting to lower their body temperature

- 20 ☐ a Whales ☐ b Cats ☐ c Foxes ☐ d Bats

When you determine a sweet or bitter taste, you have used

- 21 ☐ a the tongue ☐ b . the eye ☐ c the ear ☐ d the nose

Stomach is a part of the digestive system that.....

- 22 ☐ a chewing food ☐ b converts solid food into liquid ☐ c absorbs nutrients from food ☐ d delivers food into the esophagus

what carries the message from your eyes to your brain when you see something...

- 23 ☐ a nerves ☐ b muscle ☐ c veins ☐ d glands

What is adaptation ?

- 24 ☐ a The process by which new species appear. ☐ b A property possessed by living things to help them survive. ☐ c A form of pollination for trees. ☐ d A process of getting rid of harmful substances in living things.

The organ which is responsible for smelling sense

- 25 ☐ a ear ☐ b tongue ☐ c nose ☐ d eye

Both of human and fish

- 26 ☐ a can breathe in air ☐ b can breathe in water ☐ c use oxygen gas to breathe in ☐ d use carbon dioxide gas to breath in



Penguins live in a polar climate which.....

- 27 ☐ a is one of the hottest places on Earth ☐ b is one of the coldest places on Earth ☐ c looks like the desert climate ☐ d looks like the forest climate

The presence of a thick white fur is an adaptation in.....

- 28 ☐ a starred agama ☐ b polar bear ☐ c fennec fox ☐ d forest bear

From the negative effects of human activities on the human health are

- 29 ☐ a lung damage and asthma ☐ b asthma and wounds ☐ c heart problems and wounds ☐ d lung damage and wounds

In penguin's feetweave around each other.

- 30 ☐ a warm blood vessels and cold blood vessels ☐ b warm blood vessels and its toes ☐ c cold blood vessels and its toes ☐ d cold blood vessels and thick downy feathers

The system helps us translate messages that come from our surroundings, such as smells and sounds

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If you catch a piece of ice in your hand, you will begin to lose feeling in your fingers after a few

- 32 ☐ a minutes ☐ b hours ☐ c days ☐ d weeks

The color of fur of fennec foxes protects them from

- 33 ☐ a wind ☐ b rains ☐ c hot sun ☐ d cold weather

Adaptation helps the living organism in all the following characters except

- 34 ☐ a surviving ☐ b reproduction ☐ c hiding ☐ d death

The organ that moves the food into the stomach is.

- 35 ☐ a mouth ☐ b tongue ☐ c esophagus ☐ d small intestine

Crushing the food in your mouth is a function of

- 36 ☐ a stomach ☐ b tongue ☐ c saliva ☐ d teeth

Juices from liver and pancreas flow into.....

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When you put your hand on a hot surface, the brain sends a message to the muscles, your action is

- 39 ☐ a Keep placing your hand ☐ b You feel pain ☐ c You will do nothing ☐ d pull your hand away from a hot object

All the following properties help arctic foxes to stay warm except

- 40 ☐ a thick fur coat ☐ b short ears ☐ c tan-colored ☐ d short legs



- 41 The esophagus is a part of the digestive system that acts to
 (a) chew the food (b) absorbs nutrients from the food (c) transfer food from mouth to stomach (d) transfer air to the lungs
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- 43 Eagle is bird of prey (who eats meat). Its beak is strong and sharp this structural adaptation helps it to
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- 49 One of the behavioral adaptations that help the animal protect itself from enemies
 (a) Camouflage (b) extinction (c) immigration (d) . reproduction
- 50 All the following properties help fennec foxes to stay cool except.....
 (a) thick fur coat (b) make panting (c) tan-colored coat (d) extra-large ears

QUESTION 02

put (✓) or (X)

- 1 The fur that some animals possess to protect them from the cold is a behavioral adaptation ()
- 2 The brain is responsible for processing information. ()
- 3 The migration of birds to search for food is considered a form of behavioral adaptation ()
- 4 A person can identify spoiled food through the touch sense ()
- 5 Plants need long roots that extend deep into the soil to survive in the water scarce ()
- 6 Foxes have a strong hearing sense. ()
- 7 Plants have two types of adaptation (structural and behavioral) . ()



- 8 The skin is the sensory organ that makes you feel the smooth of the cloth ()
- 9 Food turns from a complex form to simple during the digestion process ()
- 10 The nervous system works separately from the five senses. ()
- 11 During exhalation the diaphragm moves upward and relaxes. ()
- 12 Dolphins have a strong sense of sight ()
- 13 During exhalation the diaphragm expand ()
- 14 The ear is the sense organ responsible for seeing objects ()
- 15 Plant have structural adaptation only to help them survive and grow in different environments ()
- 16 A pharynx is a common cavity between the digestive and the respiratory system. ()
- 17 The brain responsible for processing information ()
- 18 Sending bad smells by Acacia tree is a behavioral adaptation . ()
- 19 Snakes have the ability to rotate their heads in all directions ()
- 20 Some animals that live in cold have a long ears; To help it to maintain the body temperature ()
- 21 Bees can know the sweet taste by their sense of smell ()
- 22 The feet of the penguin do not freeze because they have a layer of fat ()
- 23 Seeing with our eyes is a way to help us gather information about the environment around us ()
- 24 When running and making an effort, the number of breathing times decreases ()
- 25 The age is the sensory organ that makes you feel the smoothness of cloth ()
- 26 The respiratory system is responsible for the entry of air into the body ()
- 27 Food passes from mouth to stomach through a narrow tube known as small intestine ()
- 28 Snakes have the ability to rotate their heads in all directions. ()
- 29 The nervous system plays a role in breathing ()
- 30 Echo helps dolphins locate their preys. ()
- 31 Bats use their sense of smell to avoid danger. ()
- 32 Plants have two types of adaptation (structural and behavioral) ()
- 33 A person can identify food which is not good through the sense of hearing. ()
- 34 Carbon dioxide is important for the respiration of animals ()



- 35 Living organisms can adapt their environmental conditions through structural adaptation and behavioral adaptation. ()
- 36 The food passes through the large intestine before it goes into the small intestine ()
- 37 Foxes have a strong sense of hearing. ()
- 38 Animals digging trenches is a form of structural adaptation ()
- 39 Man cannot restore the ecosystem with any way ()
- 40 Acacia trees grow in the Amazon forest ()
- 41 Exhaled air is loaded with oxygen ()

QUESTION 03

complete the following sentences using words between brackets

- 1 In order for human to remain, there must be an integration between the senses and the System to interact with the surrounding environment. (respiratory-nervous)
- 2destroys the lungs and causes many diseases.(Breathing - Pollution)
- 3 The time that the body takes to receive information from the environment and (reaction time-reflex action)
- 4 mix and crush food inside the mouth..... (Teeth only - Teeth and tongue)
- 5 The skin is an important organ of the system... (Respiratory - Nervous)
- 6 A tube with muscles that help push food into the stomach, called..... (Trachea – Esophagus)
- 7 In order for the human being to remain alive, there is an integration between the senses and thesystem to interact with the surrounding environment . (Respiratory - Nervous)
- 8 The diaphragm rises up during theoperation (Inhalation - Exhalation)
- 9 Fish breathe gas which dissolved in water (Oxygen - carbon dioxide)
- 10 The eye sends messages to through the nerves (Brain - spinal cord)
- 11 During exhalation,..... gas comes out of the lung. (Oxygen - Carbon dioxide)
- 12 The echo sound feature depends on (Hearing sense - Sight sense)
- 13 The cactus plant has spines that protect it from being eaten by desert animals, and this is considered a form of(Behavioral Adaptation -Structural Adaptation)
- 14 The lungs are one of the important organs in thesystem. (Respiratory - Digestive)
- 15 The fatty layer under the animal's skin to warm it is considered a.....adaptation(structural – behavioral)
- 16 The spinal cord is an important organ of thesystem (Nervous - Digestive)
- 17 An animal that can escape from enemies because of the length of its hind leg. (Arctic fox - jerboa)



- 18 The fat layer under the animal's skin to warm it is anadaptation
(Structural - behavioral)
- 19 Sensory organs such as the nose and ear receive information from the surrounding environment and convert it to (Nutrients - Nerve signals)
- 20 Sensory receptors send..... (a message from the brain to the muscles-a message from the sensory organs to the brain)
- 21 The dolphin can locate its prey through its sense.....(hearing - sight)
- 22 Mangroves trees grow in.....(Fresh water - salt water)

QUESTION 04

write scientific term for each of the following

- 1 A process of breaking down food into smaller parts that the body cells absorb and use to get energy and growth ()
- 2 Structural adaptation that fix the kapok tree in soggy soil and support its trunk ()
- 3 A system that helps in breaking down food into smaller parts ()
- 4 It covers the body of some type of bears to blend in with snow and keeps its body warm. ()
- 5 A change in the behaviors or acts of a living organism to survive ()
- 6 A feature in the bull shark, in which the upper surface of its body is darker than lower surface ()
- 7 A gas presents in air and water that living organisms breath during respiration process ()
- 8 A plant lives in wet land habitat and has wide leaves to absorb a large amount of sunlight ()
- 9 Structure that allow fish to breath under water ()
- 10 A tree lives in salt water and has long strong roots to resist waves ()
- 11 The first organ in digestive system ()
- 12 A change in the body structure of a living organism to survive ()
- 13 bird that has a layer of fat and thick downy feathers to adapt extreme cold weather ()
- 14 A property that helps animals to blend in with their surrounding environment ()
- 15 Structural adaptation that guard the leaves of acacia tree to prevent animals from eating them ()
- 16 The organ that absorbs water from undigested food and become solid wastes ()
- 17 Structural adaptation in water lilies that absorb large amount of sunlight ()



- 18 A tree that grows in amazon rainforest of brazil and it has hand-shaped leaves ()
- 19 An animal that changes the color of its fur color between winter and summer ()
- 20 A large muscle that contracts during breathing in and relaxes during breathing out ()
- 21 A group of organs that work together to perform a specific job ()
- 22 A type of foxes that has sandy-colored fur to adapt its desert environment. ()
- 23 A liquid substance in the mouth that moistens food and begins to break it down ()
- 24 A tree that grows in Savannah forest and it has sharp spines ()
- 25 A shape of panther chameleon feet by it holds tightly to branches ()

QUESTION 05

choose from column (B) what suits it in column (A)

1

(A)		(B)	
1	It is similar in its processing of information to a computer.	a	The spinal cord
2	when a foreign object is brought into your eyes .	b	Using the sense of sight
3	when an object falls from your hands.	c	The brain
4	the transmission of commands to the muscles to contract .	d	The reflex action occurs

2

(A)		(B)	
1	nerves	a	bronchioles
2	branches inside the lung that resemble tree branches	b	carry messages to the brain via the spinal cord
3	behavioral adaptation	c	The kapok tree emits beautiful scents to attract bats
4	vibrating motion	d	Structural adaptation of some animals to see better at night.
5	membraned like mirror	e	way to communicate between some animals



3

(A)		(B)	
①	is a common organ in the digestive and respiratory system.	a	Carbon dioxide
②	a gas necessary for respiration.	b	respiration of
③	the process of pushing air in and out of the body.	c	diaphragm
④	a muscle that has an important role in the breathing process.	d	throat(pharynx)
⑤	Is a gas produced by respiration	e	oxygen

4

(A)		(B)	
①	sight	a	it does not absorb food.
②	camouflage	b	a type of adaptation that helps an animal to hide.
③	esophagus	c	ants use it to sense and communicate smells
④	diaphragm	d	it helps us see
⑤	smell	e	a muscle that plays an important role in breathing

5

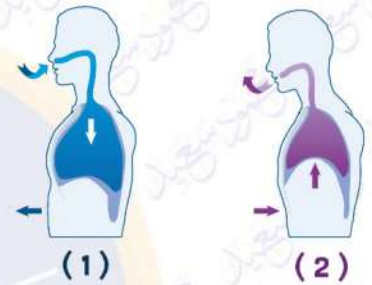
(A)		(B)	
①	light	a	it depends on the body's sense of heat for predation .
②	owl	b	it depends on the echo of the sound in locating the prey.
③	the snake	c	An animal with a bowl- like face and strong senses of hearing and vision.
④	the bat	d	it is the visible form of energy that is transmitted in the form of waves.
⑤	mirror- like membrane	e	A structural adaptation in the eye that provides some animals with better vision at night.
		f	A sense that helps us hear birds



QUESTION 06

Answer the following questions

- 1 Butterflies that have a color like the color of the tree they live on are called this phenomenon .
- 2 Rabbits have long and strong hind legs that help them to jump quickly and escape when danger determine the type of adaptation
- 3 **Note the following two figures.**
 - a. Identify the name of each of the two processes in Figures 1, 2: -
 - b. What happens to the diaphragm in Figure (1).
- 4 The system that digests food to produce energy is
- 5 Bats cannot see in the dark, but they hunt their prey at night because of....
- 6 Chameleons can move each of their eyes in a different direction, this adaptation helps them.....
- 7 some dogs live in a cold environment, while some live in a hot environment. In your opinion, which one has thick fur, the cold environment or the hot environment? And why?
- 8 Leaves of plants that float above the surface of the water are so wide that they can.....
- 9 Animals that have a thick layer of fat under the skin are animals that live in a..... environment
- 10 Some plants have thorns to defend themselves against enemies.-What is the type of adaptation?
- 11 A dolphin can locate living organisms and things under the surface of the water and explain the feature that helps the dolphin to do.....
- 12 There are some nocturnal animals that depend on their sense of heat to get their prey



- 13 Snakes depend on identifying their prey and catching them at night by sensing heat. Determine the reason.
- 14 Rabbits have strong and long hind legs that help them jump quickly and escape in dangerous times. Determine the type of adaptation.
- 15 **Complete the following sentences by using these words :-**
 (Camouflage – habitat – adaptation – predator – prey)
- a- The environment where living organisms live in is called.....
- b- An animal that hunts and eats another animal is called a....., while..... is an animal that is hunted and eaten by another animal .
- c- the characteristic that helps living organisms to survive and reproduce in the ecosystem is known as.....
- d- Type of adaptation that some animals use to hide from their predators or their prey is known as

انتهت الأسئلة مع أطيب الأمنيات بالنجاح والتوفيق



بنك الاسئلة

الصف
الرابع
الابتدائي
٢٠٢٣

التميز

أ/ محمود سعيد



Model Answers

Science

على مقررات شهر أكتوبر

٨٢

MRS . Amira Ahmed



cartoon science



El.Motamyez.School

يمكنكم الحصول على المذكرات والاختبارات من خلال مسح رمز ال QR Code
أو من خلال صفحة "التميز - أ/ محمود سعيد".
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EL MOTAMYEZ - SCIENCE Questions Bank

REVISION on unit 1 & 2

QUESTION 01

Choose the correct answer

Camouflage means that the animal.....

- 1 ☐ a can be seen easily among its surrounding ☐ b is hard to be seen among its surrounding ☐ c is easily to be seen by its preys ☐ d can be seen easily by its predators

The liver and pour their juices into the small intestine

- 2 ☐ a throat ☐ b esophagus ☐ c large intestine ☐ d pancreas

Bat is.....animal

- 3 ☐ a nocturnal ☐ b morning ☐ c Harmful ☐ d don't fly

Saliva in the mouth makes the food becomes soft and mushy with the help of ...

- 4 ☐ a teeth only ☐ b tongue only ☐ c teeth and esophagus ☐ d teeth and tongue

The roots of palm plants help them to

- 5 ☐ a Stand strong against the wind ☐ b reach the underground water ☐ c Fixation of plants in the soil ☐ d all the above

When can object comes suddenly close to your eyes..... occurs

- 6 ☐ a reflex action ☐ b respiration ☐ c sensory organ ☐ d sleeping

Animals that live in a hot environment have ears to help her, and allow heat to escape to be cool.

- 7 ☐ a small ☐ b short ☐ c long ☐ d sharp

Theis the main control center in your body.

- 8 ☐ a nerve ☐ b brain ☐ c spinal cord ☐ d sense

Which of these examples of hiding or a camouflage

- 9 ☐ a camel broad feet ☐ b camel hump ☐ c power parrot wings ☐ d the fox is golden like its environment

The animal that has the ability to turn its head in all direction is a/an

- 10 ☐ a snake ☐ b jerboa ☐ c dolphin ☐ d owl

.....is covering the body of the Arctic fox.

- 11 ☐ a Heavy hair ☐ b Thick fur ☐ c Many feathers ☐ d Heavy skin

To communicate through the sense of sight we need

- 12 ☐ a making sound ☐ b availability of light ☐ c hearing music ☐ d touching something





Adaptation includes changes that in the environment.

- 13 (a) reduce the chance of survival (b) reduce life span for individuals (c) improve species survival (d) reduce reproduction process

The sense you use to identify the scent of a perfume.

- 14 (a) taste (b) sight (c) smell (d) hearing

Panting of fennec fox belongs to.....adaptation

- 15 (a) only structural (b) only behavioral (c) both structural and behavioral (d) neither structural nor behavioral

All of the following are components of the nervous system except

- 16 (a) Spinal cord (b) heart (c) nerves (d) brain

One of the structural adaptations of water lily plant is that

- 17 (a) it has long roots (b) it has sharp spines (c) it has tiny leaves (d) it has wide leaves

Fish extracts oxygen out of water by

- 18 (a) skin (b) gills (c) Lungs (d) fins

Your sensation of hot weather depends on sensory receptors in the

- 19 (a) eyes (b) skin (c) nose (d) ears

.....are panting to lower their body temperature

- 20 (a) Whales (b) Cats (c) Foxes (d) Bats

When you determine a sweet or bitter taste, you have used

- 21 (a) the tongue (b) . the eye (c) the ear (d) the nose

Stomach is a part of the digestive system that.....

- 22 (a) chewing food (b) converts solid food into liquid (c) absorbs nutrients from food (d) delivers food into the esophagus

what carries the message from your eyes to your brain when you see something...

- 23 (a) nerves (b) muscle (c) veins (d) glands

What is adaptation ?

- 24 (a) The process by which new species appear. (b) A property possessed by living things to help them survive. (c) A form of pollination for trees. (d) A process of getting rid of harmful substances in living things.

The organ which is responsible for smelling sense

- 25 (a) ear (b) tongue (c) nose (d) eye

Both of human and fish

- 26 (a) can breathe in air (b) can breathe in water (c) use oxygen gas to breathe in (d) use carbon dioxide gas to breath in



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QUESTION 04

write scientific term for each of the following

- | | |
|--|------------------------------|
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| 2 Structural adaptation that fix the kapok tree in soggy soil and support its trunk | <u>Buttress roots</u> |
| 3 A system that helps in breaking down food into smaller parts | <u>Digestive system</u> |
| 4 It covers the body of some type of bears to blend in with snow and keeps its body warm. | <u>Thick white fur</u> |
| 5 A change in the behaviors or acts of a living organism to survive | <u>behavioral adaptation</u> |
| 6 A feature in the bull shark, in which the upper surface of its body is darker than lower surface | <u>Countershading</u> |
| 7 A gas presents in air and water that living organisms breath during respiration process | <u>oxygen gas</u> |
| 8 A plant lives in wet land habitat and has wide leaves to absorb a large amount of sunlight | <u>Water lily plant</u> |
| 9 Structure that allow fish to breath under water | <u>gills</u> |
| 10 A tree lives in salt water and has long strong roots to resist waves | <u>mangrove tree</u> |
| 11 The first organ in digestive system | <u>mouth</u> |
| 12 A change in the body structure of a living organism to survive | <u>structural adaptation</u> |
| 13 bird that has a layer of fat and thick downy feathers to adapt extreme cold weather | <u>Penguin</u> |
| 14 A property that helps animals to blend in with their surrounding environment | <u>camouflage</u> |
| 15 Structural adaptation that guard the leaves of acacia tree to prevent animals from eating them | <u>Sharp spines</u> |
| 16 The organ that absorbs water from undigested food and become solid wastes | <u>large intestine</u> |
| 17 Structural adaptation in water lilies that absorb large amount of sunlight | <u>Wide leaves</u> |





- | | | |
|----|--|--------------------|
| 18 | A tree that grows in amazon rainforest of brazil and it has hand-shaped leaves | <u>kapok tree</u> |
| 19 | An animal that changes the color of its fur color between winter and summer | <u>Arctic fox</u> |
| 20 | A large muscle that contracts during breathing in and relaxes during breathing out | <u>diaphragm</u> |
| 21 | A group of organs that work together to perform a specific job | <u>system</u> |
| 22 | A type of foxes that has sandy-colored fur to adapt its desert environment. | <u>Fennec fox</u> |
| 23 | A liquid substance in the mouth that moistens food and begins to break it down | <u>saliva</u> |
| 24 | A tree that grows in Savannah forest and it has sharp spines | <u>acacia tree</u> |
| 25 | A shape of panther chameleon feet by it holds tightly to branches | <u>V-Shaped</u> |

QUESTION 05

choose from column (B) what suits it in column (A)

1

(A)		(B)		
①	It is similar in its processing of information to a computer.	Ⓐ	The spinal cord	1 - c
②	when a foreign object is brought into your eyes .	Ⓑ	Using the sense of sight	2 - d
③	when an object falls from your hands.	Ⓒ	The brain	3 - b
④	the transmission of commands to the muscles to contract .	Ⓓ	The reflex action occurs	4 - a

2

(A)		(B)		
①	nerves	Ⓐ	bronchioles	1 - b
②	branches inside the lung that resemble tree branches	Ⓑ	carry messages to the brain via the spinal cord	2 - a
③	behavioral adaptation	Ⓒ	The kapok tree emits beautiful scents to attract bats	3 - c
④	vibrating motion	Ⓓ	Structural adaptation of some animals to see better at night.	4 - e
⑤	membraned like mirror	Ⓔ	way to communicate between some animals	5 - d



3

(A)		(B)	
①	is a common organ in the digestive and respiratory system.	a	Carbon dioxide
②	a gas necessary for respiration.	b	respiration of
③	the process of pushing air in and out of the body.	c	diaphragm
④	a muscle that has an important role in the breathing process.	d	throat(pharynx)
⑤	Is a gas produced by respiration	e	oxygen

1 - d

2 - e

3 - b

4 - c

5 - a

4

(A)		(B)	
①	sight	a	it does not absorb food.
②	camouflage	b	a type of adaptation that helps an animal to hide.
③	esophagus	c	ants use it to sense and communicate smells
④	diaphragm	d	it helps us see
⑤	smell	e	a muscle that plays an important role in breathing

1 - d

2 - b

3 - a

4 - e

5 - c

5

(A)		(B)	
①	light	a	it depends on the body's sense of heat for predation .
②	owl	b	it depends on the echo of the sound in locating the prey.
③	the snake	c	An animal with a bowl- like face and strong senses of hearing and vision.
④	the bat	d	it is the visible form of energy that is transmitted in the form of waves.
⑤	mirror- like membrane	e	A structural adaptation in the eye that provides some animals with better vision at night.
		f	A sense that helps us hear birds

1 - d

2 - c

3 - a

4 - b

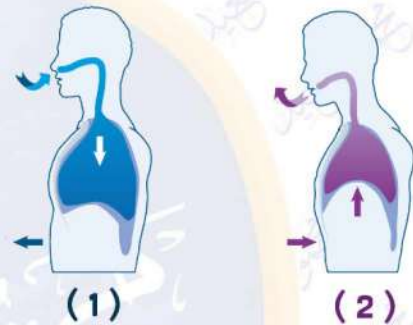
5 - e



QUESTION 06

Answer the following questions

- 1 Butterflies that have a color like the color of the tree they live on are called this phenomenon . **(Camouflage)**
- 2 Rabbits have long and strong hind legs that help them to jump quickly and escape when danger determine the type of adaptation **(Structural adaptation)**
- 3 Note the following two figures.
 - a. Identify the name of each of the two processes in Figures 1, 2: -
 - 1- **inhalation process**
 - 2- **exhalation process**
 - b. What happens to the diaphragm in Figure (1).
Diaphragm move down
- 4 The system that digests food to produce energy is ..**digestive system..**
- 5 Bats cannot see in the dark, but they hunt their prey at night because of..... **echolocation.....**
- 6 Chameleons can move each of their eyes in a different direction, this adaptation helps them..... **in catch prey – find food.....**
- 7 some dogs live in a cold environment, while some live in a hot environment. In your opinion, which one has thick fur, the cold environment or the hot environment? And why?
(cold environment - to warm it)
- 8 Leaves of plants that float above the surface of the water are so wide that they can **absorb sunlight**
- 9 Animals that have a thick layer of fat under the skin are animals that live in a.... **cold....** environment



- 10 Some plants have thorns to defend themselves against enemies.-What is the type of adaptation? **a structural adaptation.**
- 11 A dolphin can locate living organisms and things under the surface of the water and explain the feature that helps the dolphin to do **(echolocation)**
- 12 There are some nocturnal animals that depend on their sense of heat to get their prey . **(snake)**
- 13 Snakes depend on identifying their prey and catching them at night by sensing heat. Determine the reason **(as it is not seen at night)**
- 14 Rabbits have strong and long hind legs that help them jump quickly and escape in dangerous times. Determine the type of adaptation. **Structural adaptation**
- 15 Complete the following sentences by using these words :-
(Camouflage – habitat – adaptation – predator – prey)
 - a- The environment where living organisms live in is called... **habitat....**
 - b- An animal that hunts and eats another animal is called a... **predator ,** while... **prey....** is an animal that is hunted and eaten by another animal .
 - c- the characteristic that helps living organisms to survive and reproduce in the ecosystem is known as... **adaptation....**
 - d- Type of adaptation that some animals use to hide from their predators or their prey is known as**camouflage.....**

تم بحمد الله

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم



**Choose ?**

1. is the main control center of the nervous system.
☐ A Nerves ☐ B Brain ☐ C Spinal cord ☐ D Heart
2. is a change in living organism's characteristics over generation to survive.
☐ A Extinction ☐ B Migration ☐ C Growth ☐ D Adaptation
3. Is a property that helps living organism to hide from its prey or predator.
☐ A Camouflage ☐ B Migration ☐ C Echolocation ☐ D Hibernation
4. Echolocation is used by bat and to locate their prey.
☐ A Owl ☐ B Tarsier ☐ C Honeybees ☐ D Dolphin
5. The senses the body heat of its prey at night.
☐ A Tarsier ☐ B Jerboa ☐ C Owl ☐ D Snake
6. All of these are reptiles except
☐ A Chameleon ☐ B Snake ☐ C Jerboa ☐ D Agama lizard
7. Adult frogs can inhale oxygen from water by using their
☐ A Lungs ☐ B Skin ☐ C gills ☐ D Ears
8. Fish respire oxygen gas from water through
☐ A Skin ☐ B Gills ☐ C Lungs ☐ D Heart
9. is the system that is responsible for reflex actions.
☐ A Nervous system ☐ B Respiratory system ☐ C urinary system ☐ D digestive system
10. The presence of thick white fur is a physical adaptation in
☐ A Fennec fox ☐ B Arctic fox ☐ C Forest bear ☐ D Agama lizard
11. All of these live in the same habitat except
☐ A Chameleon ☐ B Golden frog ☐ C Acacia tree ☐ D Kapok tree
12. The Blend in with big green trees in rainforest to hide from enemies.
☐ A Agama lizard ☐ B Fennec fox ☐ C Arctic fox ☐ D Chameleon



13. The sense of In dolphins is stronger than that of the human.

- ☐ A Sight ☐ B Hearing ☐ C Touch ☐ D Taste

14. All of these from the components of the digestive system except

- ☐ A Mouth ☐ B Stomach ☐ C Lungs ☐ D Small intestine

15. All of these from the components of the respiratory system except

- ☐ A Lungs ☐ B Throat ☐ C Trachea ☐ D Stomach

16. All of these from the components of the nervous system except

- ☐ A Brain ☐ B Heart ☐ C Nerves ☐ D Spinal cord

17. Is a common organ between digestive and respiratory system.

- ☐ A Stomach ☐ B Lungs ☐ C Throat ☐ D Esophagus

18. has weave blood vessels in its feet and toes to keep it warm.

- ☐ A Polar bear ☐ B Penguin ☐ C Arctic fox ☐ D Owl

19. Can rotate (turn) its head in all directions.

- ☐ A Bats ☐ B Owl ☐ C Jerboa ☐ D Chameleon

20. can move its eyes in two opposite directions.

- ☐ A Chameleon ☐ B Owl ☐ C Snake ☐ D Penguin

21. Has large leaves to absorb a big amount of sunlight.

- ☐ A Barbary fig ☐ B Water lily ☐ C Pine tree ☐ D Palm tree

22. All of these have spines except

- ☐ A Acacia tree ☐ B Cactus ☐ C Barbary fig ☐ D Kapok tree

23. has needle leaves.

- ☐ A Kapok tree ☐ B Pine tree ☐ C Acacia tree ☐ D Water lily

24. is the main control center in the humans and animals bodies.

- ☐ A Heart ☐ B Brain ☐ C Spinal cord ☐ D Lungs

25. All of these are found in polar habitat except

- ☐ A Pine tree ☐ B Polar bear ☐ C Arctic fox ☐ D Fennec fox



26. pants like dog.

- ☐ A Fennec fox ☐ B Arctic fox ☐ C Caracal ☐ D Jerboa

27. All of these live in desert habitat except

- ☐ A Jerboa ☐ B Chameleon ☐ C Caracal ☐ D Fennec fox

28. All of these are natural changes except

- ☐ A Climate change ☐ B Air pollution ☐ C Flood ☐ D Wildfires

29. Both have an excellent night vision to hunt.

- ☐ A Snake and owl ☐ B Owl and bat ☐ C Cat and snake ☐ D Owl and cat

30. has an insulating fat layer and thick downy feathers.

- ☐ A Polar bear ☐ B Arctic fox ☐ C Penguin ☐ D Fennec fox

31. Both and has brown fur.

- ☐ A Polar bear, arctic fox ☐ B Arctic fox, dark bear ☐ C Polar bear, dark bear ☐ D Penguin, dark bear

32. moistens food in mouth.

- ☐ A Acid ☐ B Pancreas juice ☐ C Liver juice ☐ D Saliva

34. Starch is changed into sugar in

- ☐ A Stomach ☐ B Mouth ☐ C Small intestine ☐ D Large intestine

35. Juices of liver and pancreas are poured in

- ☐ A Small intestine ☐ B Mouth ☐ C Large intestine ☐ D Stomach

36. Food is changed into soupy liquid in the

- ☐ A Mouth ☐ B Stomach ☐ C Small intestine ☐ D Large intestine

37. lives in salt and fresh water.

- ☐ A Penguin ☐ B Bull shark ☐ C Fennec fox ☐ D Chameleon

38. Digestive starts with and ends with

- ☐ A Mouth, small intestine ☐ B Mouth, anus ☐ C Mouth, throat ☐ D Throat, small intestine



39. All of these have structural adaptation in their eyes, so it is strong vision except
- ☐ A Fishing cat ☐ B Bat ☐ C Owl ☐ D Panther chameleon
40. All of these have structural adaption in their ears to have sharp sense hearing except
- ☐ A Jerboa ☐ B Fennec fox ☐ C Owl ☐ D Snake
41. All of these are nocturnal animals except
- ☐ A Penguin ☐ B Bats ☐ C Snake ☐ D Owl
42. Water is absorbed from undigested food in the
- ☐ A Small intestine ☐ B Stomach ☐ C Esophagus ☐ D Large intestine
43. You can recognize the sour taste of vinegar by the sense of
- ☐ A Sight ☐ B Taste ☐ C Smell ☐ D Hearing
44. You can differentiate between water and vinegar by using senses of
- ☐ A Sight and smell ☐ B Smell and hearing ☐ C Smell and taste ☐ D Smell and touch
45. All of these have extra-large ears except
- ☐ A Caracal ☐ B Fennec fox ☐ C Arctic fox ☐ D Jerboa
46. The exists in the backbone of the human body.
- ☐ A Brain ☐ B Spinal cord ☐ C Muscles ☐ D Heart
47. All of these found in the rainforest habitat except
- ☐ A Panther chameleon ☐ B Kapok tree ☐ C Acacia tree ☐ D Golden frog
48. The processes the received information and translate it.
- ☐ A Nerves ☐ B Spinal cord ☐ C Heart ☐ D Brain
49. The nerves of Are directly connected to the brain.
- ☐ A Heart and eyes ☐ B Heart and hands ☐ C Eyes and toes ☐ D Eyes and hand
50. Spread all around the human body to carry messages to and from them.
- ☐ A Brain ☐ B Spinal cord ☐ C Nerves ☐ D Muscles



51. The system controls all the body functions of the living organism.

- ☐ A Digestive ☐ B Respiratory ☐ C Nervous ☐ D Circulatory

52. The sends information to the brain when you smell a perfume scent

- ☐ A Eye ☐ B Nose ☐ C Ear ☐ D Tongue

53. Are the senses uses to distinguish between milk and water.

- ☐ A Taste and hearing ☐ B Taste and sight ☐ C sight and hearing ☐ D Smell & hearing

54. When your hand touches the spines of a cactus, it is withdrawn in

- ☐ A One minute ☐ B Two minutes ☐ C A second ☐ D Less than a second

55. The sense of the eyesight in the is very strong.

- ☐ A Owl ☐ B Bat ☐ C Snake ☐ D A and C

56. A snake can locate the jerboa at night by the..... emitted from jerboa's body.

- ☐ A Light ☐ B Sound ☐ C Smell ☐ D Heat

57. All of these have a sharp sense of hearing except the

- ☐ A Fennec fox ☐ B Snake ☐ C Owl ☐ D Dolphin

58. Nutrients are absorbed from digested food in

- ☐ A Small intestine ☐ B Large intestine ☐ C Stomach ☐ D Esophagus

59. Oxygen gas passes from to lungs.

- ☐ A Mouth ☐ B Esophagus ☐ C Trachea ☐ D Nose

60. Panther chameleon is a type of the

- ☐ A Birds ☐ B Lizards ☐ C Amphibians ☐ D Birds

61. Both dolphin and owl have sharp sense of

- ☐ A Sight ☐ B Smell ☐ C Hearing ☐ D Touch

62. When the reaction time of animal is very long, that means that animal can

- ☐ A Survive ☐ B Reproduce ☐ C Be at risk ☐ D Run away fast



63. Exchange of gases occurs in the

- ☐ A Trachea ☐ B Throat ☐ C Lungs ☐ D Nose

64. The Is a nocturnal animal that has a bowled shaped face.

- ☐ A Bat ☐ B Dogs ☐ C mongoose ☐ D Owl

65. Lungs are from the components of the system.

- ☐ A Digestive ☐ B Respiratory ☐ C Nervous ☐ D Circulatory

66. The is found in both digestive and respiratory system.

- ☐ A Esophagus ☐ B Trachea ☐ C Throat ☐ D Larynx

67. is an animal that can fly and depends on the bouncing sound to catch its prey.

- ☐ A Dolphin ☐ B Bat ☐ C Snake ☐ D Owl

68. has strategy of camouflage called countershading to hunt in water.

- ☐ A Bat ☐ B Dog ☐ C Bull shark ☐ D Owl

69. The is a bird that can swim.

- ☐ A Bat ☐ B Penguin ☐ C Owl ☐ D Polar bear

70. All of these are adapted to live in polar habitat except

- ☐ A Pine trees ☐ B Polar bear ☐ C Penguin ☐ D Fennec fox

71. Downy thick feathers on penguin's body trap against its skin.

- ☐ A Cold water ☐ B Cold air ☐ C Warm air ☐ D Warm water

72. Acacia tree's trunk can store

- ☐ A Fats ☐ B Water ☐ C Milk ☐ D Air

73. Plants of dry desert must have..... to get water from the sand soil.

- ☐ A Long trunk ☐ B Long roots ☐ C Large leaves ☐ D Long branches

74. The food moves to stomach through the

- ☐ A Throat ☐ B Esophagus ☐ C Tongue ☐ D Small intestine



75. covers the bodies of bears in polar habitat.

- ☐ A Dark fur ☐ B Dark feathers ☐ C Hair ☐ D White fur

76. is the liquid found in mouth.

- ☐ A Acid ☐ B Lemon juice ☐ C Saliva ☐ D Milk

77. like toads have two ways of breathing.

- ☐ A Fish ☐ B Reptiles ☐ C amphibians ☐ D Birds

78. is a Plant that is adapted to live in salt water.

- ☐ A Bull shark ☐ B Pine tree ☐ C Water lily ☐ D Mangrove tree

79. The Can change its body coat color from season to other.

- ☐ A Fennec fox ☐ B Arctic fox ☐ C Polar bear ☐ D Penguin

80. Acacia tree is adapted to live in Habitat.

- ☐ A Tundra desert ☐ B Rainforest ☐ C Wetland ☐ D Savannah forest

81. All of these can get in oxygen from air except

- ☐ A Palm tree ☐ B Toad ☐ C Bull shark ☐ D Frog

82. Cutting down forests may cause the disappearance of the

- ☐ A Agama lizard ☐ B Bull shark ☐ C Polar bear ☐ D Panther chameleon

83. All of the following belongs to the respiratory system except

- ☐ A Nose ☐ B Throat ☐ C Stomach ☐ D Lungs

84. has hand-shaped leaves.

- ☐ A Water lily ☐ B Kapok tree ☐ C Palm tree ☐ D Acacia tree

85. All of these plants are adapted to live in dry desert except the

- ☐ A Palm tree ☐ B barbery fig ☐ C Pine tree ☐ D Cactus

86. The branches of grow and gather on the top.

- ☐ A Palm tree ☐ B Acacia tree ☐ C Kapok tree ☐ D Water lily



87. Panther chameleon has a very long sticky to catch insects.

- ☐ A Feet ☐ B Tongue ☐ C leg ☐ D Tail

88. All of these have sandy colored coat except

- ☐ A Fennec fox ☐ B Caracal ☐ C Arctic fox ☐ D Camel

89. have special blood vessels in their feet, to survive in polar habitat.

- ☐ A Polar bear ☐ B Penguin ☐ C Fennec fox ☐ D Frog

90. Adaptation helps the living organisms in all of these except

- ☐ A Survival ☐ B Reproduction ☐ C Hiding ☐ D Extinction

91. All of these hide in shaded areas to avoid hot weather except

- ☐ A Agama lizard ☐ B Caracal ☐ C Arctic fox ☐ D Fennec fox

92. If you stand a barefoot on snow, your feet will get frozen after a few

- ☐ A Days ☐ B Hours ☐ C Minutes ☐ D Weeks

93. Penguin's body have an insulating layer of To keep it warm.

- ☐ A Proteins ☐ B Fats ☐ C Sugar ☐ D Water

94. Penguin's feet have blood vessels that bring up from its feet towards the body

- ☐ A Cold water ☐ B Warm water ☐ C Cold blood ☐ D Warm blood

95. The presence of thick white fur is an adaptation in the

- ☐ A Forest bear ☐ B Fennec fox ☐ C Penguin ☐ D Polar bear

96. Bears that live in forests have fur that of the polar bear.

- ☐ A Whiter than ☐ B Darker than ☐ C Similar than ☐ D Brighter than

97. Is a property that helps animals to blend in with the surrounding environment

- ☐ A Migration ☐ B Mimicry ☐ C Camouflage ☐ D Echolocation

98. Body of some lizards are covered with

- ☐ A Feathers ☐ B Scales ☐ C Fur ☐ D Hair



99. The color of fennec fox protect it from

- ☐ A Cold weather ☐ B Sun heat ☐ C Rain ☐ D Wind

100. When panther chameleon stands on tree's leaves, it color becomes

- ☐ A Brown ☐ B White ☐ C Green ☐ D Blue

101. The color seeds of kapok tree is

- ☐ A White ☐ B Green ☐ C Yellow ☐ D Red

102. It is difficult for rainforest plants to get

- ☐ A Water ☐ B Wind ☐ C Oxygen ☐ D Sunlight

103. The one animal that can eat acacia tree leaves is the

- ☐ A Rat ☐ B Caracal ☐ C Penguin ☐ D Giraffe

104. Polar bear have white fur to blend in with

- ☐ A Sand ☐ B Snow ☐ C Trees ☐ D Rocks

105. Acacia tree and Are umbrella-shaped trees.

- ☐ A Mangrove tree ☐ B Water lily ☐ C Barbary fig ☐ D Kapok tree

106. has a triangular shape and needle leaves.

- ☐ A Water lily ☐ B Palm tree ☐ C Pine tree ☐ D Mangrove tree

107. All of these keep the animals away by sharp spines except

- ☐ A Acacia tree ☐ B Barbary fig ☐ C Pine trees ☐ D Cactus

108. In large intestine, Is absorbed from undigested food.

- ☐ A Water ☐ B Fats ☐ C Proteins ☐ D Sugar

109. All of these are from the digestive system organs except

- ☐ A Mouth ☐ B Nose ☐ C Anus ☐ D Stomach

110. crushes food inside the mouth.

- ☐ A Saliva ☐ B Teeth ☐ C Tongue ☐ D Stomach



111. The allows food to pass to the small intestine.

- ☐ A Esophagus ☐ B Large intestine ☐ C Stomach ☐ D Throat

112. All of these exist in the mouth except

- ☐ A Tongue ☐ B Acid ☐ C Saliva ☐ D Teeth

113. The throat is connected to the stomach through

- ☐ A Mouth ☐ B Esophagus ☐ C Trachea ☐ D Pharynx

114. The complete digestion of food occurs in the

- ☐ A Stomach ☐ B large intestine ☐ C Small intestine ☐ D Anus

115. The nutrients are absorbed in the And moves to the blood.

- ☐ A Large intestine ☐ B Small intestine ☐ C Stomach ☐ D Esophagus

116. The solid wastes of undigested food is expelled outside the body through

- ☐ A Small intestine ☐ B Large intestine ☐ C Anus ☐ D Lungs

117. Air passes from throat to

- ☐ A Nose ☐ B Lungs ☐ C Mouth ☐ D Trachea

118. In lungs, alveoli are surrounded by

- ☐ A Air ☐ B Water ☐ C Blood vessels ☐ D Small intestine

119. The oxygen gas moves from alveoli to blood in the

- ☐ A Mouth ☐ B Trachea ☐ C Throat ☐ D Lungs

120. Fish use To breathe in water.

- ☐ A Gills ☐ B Lungs ☐ C Tails ☐ D Skin

121. Amphibians live in environment.

- ☐ A Dry ☐ B Moist ☐ C Arctic ☐ D Sandy

122. All of these are changes in the ecosystem by the human activity except

- ☐ A Forest removal ☐ B Wildfires ☐ C Air pollution ☐ D Water pollution



123. If the number of an animal species becomes zero, it means that this species
☐ A Is endangered ☐ B Can survive ☐ C Extinct ☐ D Is about to extinct
124. The nerves transfer information from and to the brain in the form of impulses.
☐ A Light ☐ B Sound ☐ C Magnetic ☐ D Electrical
125. Can gather the information from the surroundings.
☐ A Sensory organs ☐ B Brain ☐ C Nerves ☐ D Spinal cord
126. Sensory receptors of the receive the smell of pizza.
☐ A Mouth ☐ B Ears ☐ C Eyes ☐ D Nose
127. In the polar habitat, A Might be a prey for the polar bear.
☐ A Fennec fox ☐ B Caracal ☐ C Penguin ☐ D Cow
128. The System is responsible for moving your hand a way from a hot object.
☐ A Digestive ☐ B Nervous ☐ C Respiratory ☐ D Circulatory

Put (✓) or (✗) ?

1. Snake has special parts in its tail to sense the heat of prey's body. ()
2. Diaphragm muscle belongs to the nervous system. ()
3. Penguin has feathers and fat on its feet and toes. ()
4. Diaphragm relaxes and moves up in exhalation process. ()
5. The sense of hearing dolphins is stronger than that of human. ()
6. Bat is a type of birds that use echolocation to locate its prey. ()
7. Echolocation in bats is a behavioral adaptation. ()
8. Acacia tree lives in rainforest habitat. ()
9. Bat hunts at night by receiving echo waves bounced back from the prey's body. ()
10. Hopping of jerboa in zigzag way to escape from a viper is a structural adaptation. ()
11. Our brain processes what we see faster than what we hear. ()
12. Dogs have sharper senses of hearing and smell. ()
13. When you hear a fire alarm, your eyes send a signal to the brain. ()
14. The jerboa's reaction time is very slow. ()
15. Dolphins use echolocation only for finding food. ()



16. Nerves are very important part of the digestive system. ()
17. Chameleon can see its prey and predator at the same time. ()
18. Plowing grasslands is one of the natural changes in the ecosystem. ()
19. Fish use gills to take carbon dioxide out of the water. ()
20. Golden frog is an extinct species. ()
21. Reptiles like toads can inhale oxygen from water and air. ()
22. Bull shark has a dark belly and white back to can't be seen by its prey. ()
23. Mouth has a liquid substance called acid that softens food. ()
24. Both salamander and fish can breathe by lungs. ()
25. The diaphragm moves upward during inhalation. ()
26. Fennec fox fur color blends with the snow. ()
27. Undigested food moves from the small intestine to the large intestine. ()
28. Human can pollute the environment, but he can't restore it. ()
29. Amphibians aren't sensitive to the environmental changes. ()
30. Water pollution has a harmful impact on both humans and fish. ()
31. When an ecosystem is completely polluted, no longer organisms can live in it. ()
32. The trunk of acacia tree stores fat, but camel's hump stores water. ()
33. Acacia tree has taproots, but kapok tree has buttress roots. ()
34. Water lilies have wide leaves to absorb sunlight in desert habitat. ()
35. Fennec fox has extra-large ears to keep them warm. ()
36. Bull shark can live in rivers and seas. ()
37. Panting of the arctic fox is a behavioral adaptation. ()
38. Bull sharks hunts only at night time. ()
39. The brown fur of the polar bear helps it to blind in with snow. ()
40. Palm trees have leaves like needles. ()
41. Some lizards have colored feathers to blend in with environment. ()
42. The polar bear can survive in the same habitat of the panther chameleon. ()
43. When the snow melts in polar region, the fur of arctic fox turns into white. ()
44. The ears of fennec fox are larger than that of arctic fox. ()
45. Kapok tree has long roots to fix it in sandy soil. ()
46. Animals can't eat barbary fig due to its sharp spines. ()
47. Thick roots of palm trees are behavioral adaptation. ()
48. Plants of dry desert are adapted to store water. ()
49. All animals are similar in the shape and structure of their digestive system. ()



50. Juices of pancreas and liver are poured in the stomach. ()
51. The digestive system ends with the anus. ()
52. Carbon dioxide moves from lungs to trachea in inhalation process. ()
53. The digestion process starts in the mouth. ()
54. The human body gets oxygen gas from the food. ()
55. During running the rate of breathing decreases. ()
56. Exposure to air rich in dust and exhausts harms the respiratory system. ()
57. Diaphragm muscle contracts during inhalation process. ()
58. Both of small intestine and alveoli are surrounded by blood vessels. ()
59. Absorption of nutrients occur in the large intestine. ()
60. The chest cavity gets narrow in inhalation process. ()
61. In exhalation process, air rich in oxygen is expelled out the body. ()
62. Gills are found in one side of fish's head. ()
63. Both lungs and gills take in carbon dioxide and release oxygen gas. ()
64. When ecosystem is polluted, only animals are affected. ()
65. Amphibians as toads can respire oxygen gas from air by their skins. ()
66. Water pollution causes asthma and problems of respiratory system. ()
67. The slow change of the ecosystem is caused by human activity. ()
68. Amphibians and arctic fox can't be found in the same habitat. ()
69. Fish can only breathe in air. ()
70. Panda and the golden frog are from the endangered species. ()

Write the scientific term ?

1. The change over generations that helps living organisms to survive. (.....)
2. The change in the structure of living organism body. (.....)
3. The change in the behavior of the living organism. (.....)
4. A type of adaptation by which the animal hides from its prey or predator. (.....)
5. A property in which the animal blend in with the surroundings to hide. (.....)
6. The type of camouflage in bull shark. (.....)
7. The property in which animal's back has darker color than its belly. (.....)
8. A feature in bull shark's body that helps it to sneak up on its prey. (.....)
9. The type of insulating layer in penguin's skin. (.....)
10. They cover penguin's body. (.....)
11. A non-flying bird that has weave blood vessels in its feet. (.....)



12. The habitat of the penguin. (.....)
13. The fox that pants like dog. (.....)
14. The fox that changes its fur's color by changing seasons. (.....)
15. A type of cats that lives in hot desert. (.....)
16. The color of fur that covers most desert animals. (.....)
17. They cover the body of lizards. (.....)
18. The lizard that lives in hot desert. (.....)
19. The lizard that lives in rainforest habitat. (.....)
20. An endangered species of amphibians. (.....)
21. Travelling of birds in winter from cold to warm places. (.....)
22. The bears that live in forests. (.....)
23. It covers the polar's bear body. (.....)
24. A reptile that can move its eye in two opposite directions. (.....)
25. A bird that can rotate its head in all directions. (.....)
26. A plant that grows in salt water. (.....)
27. A plant that grows in fresh water with wide leaves. (.....)
28. An umbrella-shaped tree that lives in savanna forests. (.....)
29. An umbrella-shaped tree that lives in rainforests. (.....)
30. The animal that can reach the leaves of acacia tree. (.....)
31. The tree that has buttress roots. (.....)
32. That tree that has taproots. (.....)
33. The tree that stores water in trunk. (.....)
34. The animal that stores fat in its hump. (.....)
35. They found in acacia tree's leaves to keep animals away. (.....)
36. The type of message sent by acacia tree to other trees. (.....)
37. A substance produced by acacia tree's leaves to be tasted bad. (.....)
38. The tree that has hand-shaped leaves. (.....)
39. The tree that has a triangular shape. (.....)
40. The tree that grows in polar habitat. (.....)
41. The tree with short branches and needle leaves. (.....)
42. The system that breaks down food into nutrients to get energy. (.....)
43. The system that is responsible for human's breathing. (.....)
44. The system that controls all the vital processes in our body. (.....)
45. The process of breaking down food into nutrients. (.....)



46. The process of entering oxygen and expelling carbon dioxide outside the body. (.....)
47. The process in which oxygen gas enters the body. (.....)
48. The process in which carbon dioxide is expelled outside the body. (.....)
49. The muscle that helps in the inhalation and exhalation. (.....)
50. They crush and chew food in mouth. (.....)
51. The organ in which the digestion process starts. (.....)
52. The organ by which the digestive system ends. (.....)
53. The organ by which solid wastes is expelled outside the body. (.....)
54. The liquid found in mouth. (.....)
55. It mixes food with saliva. (.....)
56. It softens food and change starch into sugar. (.....)
57. The first type of food that is digested in mouth. (.....)
58. A muscular tube that allows food to pass to stomach. (.....)
59. The common organ between digestive and respiratory system. (.....)
60. It changes food into a soupy liquid form. (.....)
61. The organ that starts from the end of the stomach. (.....)
62. The longest part of the digestive system. (.....)
63. The organ where the food is completely digested and turns to nutrients. (.....)
64. The organ where the nutrients is absorbed from the digested food. (.....)
65. The organ where water is absorbed from the undigested food. (.....)
66. The organ where undigested food is stored. (.....)
67. It transports digested food from small intestine to all body parts. (.....)
68. The organ through which oxygen passes to the lungs. (.....)
69. Two organs that look like balloons and lies behind ribs. (.....)
70. Air sacs found in lungs. (.....)
71. Air sacs that are responsible for gas exchange. (.....)
72. They surround the alveoli in lungs. (.....)
73. The air rich in oxygen gas. (.....)
74. The air rich in carbon dioxide. (.....)
75. A fruit rich in vitamin C. (.....)
76. It branches like a tree inside lungs. (.....)
77. It lets exhaled air passes to trachea. (.....)
78. Species live in moist environment and have two ways of respiration. (.....)
79. They help fish to respire in water. (.....)



80. A structure that helps frogs to breathe in water. (.....)
81. A structure that helps salamander to breathe on land. (.....)
82. A pollution that causes asthma and damage of lungs. (.....)
83. A property used by bat and dolphin to locate their prey. (.....)
84. The sound waves bounced back from a solid object. (.....)
85. The waves produced by dolphin that travels in water. (.....)
86. The super sensory organ in the dolphin. (.....)
87. They communicate with other by making sounds. (.....)
88. A flying mammal that locates its prey by echolocation. (.....)
89. A reptile that senses the heat of its prey's body. (.....)
90. A rodent that has large ears and long hind legs. (.....)
91. An animal that has a bowled shaped face. (.....)
92. An animal that uses echo waves to locate its prey in water. (.....)
93. The animal that becomes active at night. (.....)
94. A bundle of nerves that pass through the backbone. (.....)
95. The main control center of the body. (.....)
96. The organ that processes information and make a proper response. (.....)
97. They receive information (stimuli) from the surrounding. (.....)
98. Nerves that found in the sensory organs. (.....)
99. The form in which signals are transmitted from sense organs to brain. (.....)
100. They transmit messages from the brain to all body and vice versa. (.....)
101. They branch from the spinal cord and spread in all the body. (.....)
102. A rapid response made the body to a stimulus to avoid danger. (.....)
103. The time taken by the body to make a response to a stimulus. (.....)
104. A type of structural adaptation that helps jerboa to hear noise. (.....)
105. The organ used to differentiate between different food scents. (.....)
106. The sense by which you can identify the different sounds. (.....)

Match from column (B) what suits it in column (A) ?

1	(A)	(B)
	1. Polar bear	a. Has dark thick fur
	2. Fennec fox	b. Has white thick fur
	3. Brown bear	c. Has sandy-colored fur
	4. Desert lizard	d. Has colorful scales

1.

2.

3.

4.



2	(A)	(B)
	1. Pine tree	a. Has hand-like leaves.
	2. Kapok tree	b. Has needle-shaped leaves.
	3. Acacia tree	c. Lives in salt water.
	4. Mangrove tree	d. Has tiny leaves.
	1.	2. 3. 4.

3	(A)	(B)
	1. Brown bear	a. Lives in desert habitat.
	2. Penguin	b. Lives in polar habitat and is coated with white thick fur
	3. Caracal	c. Lives in polar habitat and is coated with thick feathers.
	4. Polar bear	d. Lives in forest ecosystem.
	1.	2. 3. 4.

4	(A)	(B)
	1. Water lily	a. Lives in savannah forests.
	2. Kapok tree	b. Lives in the polar habitat.
	3. Acacia tree	c. Lives in wetland habitat.
	4. Pine tree	d. Lives in tropical rainforests.
	1.	2. 3. 4.

5	(A)	(B)
	1. Saliva	a. Undigested food leaves the body through it.
	2. Anus	b. Changes food into a soupy liquid form.
	3. Small intestine	c. Changes starch into sugar.
	4. stomach	d. Food is completely digested in it.
	1.	2. 3. 4.

6	(A)	(B)
	1. Mouth	a. A muscular tube that pushes food to esophagus.
	2. Large intestine	b. Contains an acid and digestive juices.
	3. Throat	c. Contains teeth, tongue and saliva.
	4. Stomach	d. Extends from the end of the small intestine.
	1.	2. 3. 4.



7	(A)	(B)
	1. Salamander	a. Respire oxygen from water by gills.
	2. Fish	b. Respires oxygen from water by skin and from air by lungs.
	3. Human	c. Respires oxygen from water by gills and from air by lungs.
		d. Respires oxygen from air by lungs.
	1.	2. 3.

8	(A)	(B)
	1. Golden frog	a. Can live in fresh and salt water.
	2. Bull shark	b. Lives in a moist habitat
	3. Starred agama lizard	c. Can live in dry cold habitat.
	4. Arctic fox	d. Lives in dry hot desert.
	1.	2. 3. 4.

9	(A)	(B)
	1. Golden frog	a. Lives in fresh and salt water.
	2. Panther chameleon	b. Is a flyless bird that has weave blood vessels in its feet.
	3. Penguin	c. Is a reptile that lives in rainforest habitat.
	4. Bull shark	d. Is an amphibian whose natural habitat is rainforest.
	1.	2. 3. 4.

10	A)	(B)
	1. Dog	a. It has strong hearing to locate objects in air by echolocation.
	2. Dolphin	b. It has super senses of hearing and sight.
	3. Bat	c. It has super senses of hearing and smelling, so it is used in guarding.
	4. Owl	d. It has a strong hearing to locate objects in water by echolocation.
	1.	2. 3. 4.

11	(A)	(B)
	1. Electrical impulses	a. It is a rapid response to an external stimulus.
	2. Reflex action	b. They have sensory receptors that receive sounds from the surrounding.
	3. Skin	c. They are the form by which information are transmitted through nerves.
	4. Ears	d. It is responsible for differentiating between hot and cold objects.
	1.	2. 3. 4.



(A)	(B)
1. Panther chameleon	a. Lives in forests and has a dark fur.
2. Bull shark	b. Has weave blood vessels in its feet.
3. Brown bear	c. Lives in tropical forest and has V-shaped feet.
4. Penguin	d. Lives in fresh and salt water.

1. 2. 3. 4.

Cross out the odd word.....

- Owl – bat – snake – jerboa.
- Stomach – lung – trachea – nose.
- Salamander – frog – toad – chameleon.
- Palm tree – mangrove – barbary fig – cactus.
- Kapok tree – chameleon – agama lizard – golden frog.
- Fennec fox – arctic fox – polar bear – penguin.
- Agama lizard – chameleon – snake – owl.
- Wildfires – drought – cutting trees – climate change.
- Caracal – fennec fox – chameleon – agama lizard.
- Brain – spinal cord – nerves – heart.
- Owl – bat – jerboa – snake.

Compare between

1	Point of comparison	Arctic fox	Fennec fox
	1. Habitat	.....	.....
	2. Body coat	.....	.....
	3. Ears	.....	.....
2	Point of comparison	Inhalation process	Exhalation process
	1. Type of air	.....	.....
	2. Diaphragm	.....	.....
	3. Chest size	.....	.....
3	Point of comparison	Polar bear	Forest bear
	1. Fur color	.....	.....
	2. Habitat	.....	.....



4	Point of comparison	Acacia tree	Kapok tree
	1. Habitat	.....	.....
	2. Root	.....	.....

5	Point of comparison	Pine tree	Water lily
	1. Habitat	.....	.....
	2. Type of leaves	.....	.....

6	Point of comparison	Fish	Human	Frogs
	1. Inhaled gas	.....	.....	.....
	2. Respire by	.....	.....	.....

7	Point of comparison	Brain	Nerves
	1. Function	.....	.....

Give reason for

- Blood vessels in penguin's feet are wrapped on each other.**
To keep its feet warm.
- Penguin's skin has a fatty layer and its body is covered with thick feathers.**
To stay warm.
- Desert lizard hides in shaded area in hot sunny days.**
To stay cool. Or to avoid hot weather.
- Polar bear has a white fur, but brown bear has a dark fur.**
To blend in with snow, brown bear to blend in with forest trees.
- Fennec fox and caracal have a sandy-colored fur.**
To blend in with sand or hide from its prey or predator.
- Polar bear has a thick fur.**
To stay warm.
- Bull shark has a dark back and a white belly.**
To sneak up on its prey. (blend in with water)
- Panther Chameleon has colored and shiny scales.**
To hide from its prey or predator.
- Panther Chameleon can inflate its body with air and open its mouth widely.**
To scare its enemy.



- 10. Panther Chameleon has a V-shaped foot and long tail.**
To hold on tree branches.
- 11. Panther Chameleon's eyes can move independently at two opposite directions.**
To search for prey and look out a predator.
- 12. Branches of acacia tree gather on the top of its trunk.**
To prevent animals from eating its leaves.
- 13. Acacia tree and barbary fig have sharp spines.**
To not be eaten by animals.
- 14. Water lily has wide leaves.**
To absorb a big amount of sunlight.
- 15. Branches of pine tree don't get broken by falling snow.**
Because they are short.
- 16. Pine tree has a triangle shape.**
To let snow slide down and not be broken.
- 17. Acacia tree and kapok tree depend on wind.**
To send messages.
- 18. Mangrove tree has long roots.**
To resist water waves.
- 19. Saliva is very important.**
Because it softens food and change starch into sugar.
- 20. You must not eat much fast food.**
To keep digestive system healthy.
- 21. You must chew food well.**
To keep digestive system healthy.
- 22. Golden frog is and endangered species.**
Due to severe changes in rainforest habitat.
- 23. Dry habitat is not suitable for amphibians.**
As they need water to respire.
- 24. Air and water pollution affect negatively on amphibians' survival.**
As they need clean water and air to respire.
- 25. Exhausts of cars and factories affects negatively on human.**
As they cause damage of lungs, asthma and heart diseases.
- 26. Rapid change is more dangerous than slow change on an ecosystem.**
As there's no time for living organisms to adapt.
- 27. Fish can't breathe in air.**
As they don't have lungs. Or they have gills that take in oxygen from water.



28. Diaphragm is very important in respiration process.

As it contracts and relaxes causing inhalation and exhalation.

29. You must avoid smoking and staying at smoking areas.

To keep respiratory system healthy.

30. Dogs are used in hunting.

As they have super senses of hearing and smell.

31. Owls can hunt at night.

As it has super senses of sight and hearing.

32. Dolphins can hear all kinds of sounds.

As it has super sense of hearing.

33. Desert animals become active at night.

To avoid hot weather at day.

34. Snakes have special parts in their face.

To sense the heat of its prey's body.

35. Owls have bowl-shaped face.

To detect sounds and amplify them.

36. Owls can hear even quiet movements of a distant prey.

As it has a bowl-shaped face and feathers on head that amplify sounds.

37. You move your hand away when you touch the cactus's spines.

Due to the reflex action.

38. You blink when intense light falls on your eyes.

Due to the reflex action.

39. Jerboa can hop for a long distance.

As it has long hind legs to escape from danger.

40. Jerboa's feet and toes are covered with hair.

To catch sand when it jumps.

41. Jerboa have large ears.

To hear any movement from a nearby snake.

42. Brain has important role in the nervous system.

As it processes information and makes the proper response to all stimuli.



What happens if ?

43. Sound waves produced from a dolphin hit an object in water.

Dolphin receives it and locate the prey.

44. The part in snake's face that senses heat is injured.

It can't hear its prey and can't find it in the dark.

45. Owls don't have a bowl-shaped face.

They can't hear its prey in the dark.

46. Your hand touches the spines of cactus. Or your hand touches a very hot object.

You withdraw your hand quickly as a reflex action.

47. You smell a burning food near you.

Your nose sends a message to the brain to check the smell.

48. A jerboa hears the movement of a nearby snake.

Ears send a signal to a brain then brain make its leg jump.

49. The sensory receptors in the eye stop sending messages to the brain.

We can't see.

50. Diaphragm muscle contracts and move down.

Oxygen gas enters the lungs. (inhalation process occurs)

51. Diaphragm muscle relaxes and moves upward.

Carbon dioxide is expelled outside the body. (Exhalation process occurs)

52. Ecosystem is rapidly changed.

Living organisms may move, disappear or die.

53. Increasing of car and factories exhausts In an ecosystem.

It causes air pollution, asthma and damage of lungs.

54. Pollution level increases in the habitat of amphibians.

They can't survive in it.

55. Number of amphibians' predators increases.

Number of amphibians decreases.

56. Frogs can only respire by lungs. Frogs skin gets dry.

They can't survive in water.

57. Small intestine is removed from the human body.

We can't get nutrients from food we eat.

58. Liver and pancreas don't pour their juices in the small intestine.

Food won't be digested.

59. Absorption of nutrients to inter tiny blood vessels.



Blood carries them to all body parts.

60. A pine tree has an umbrella shape not a triangle shape.

Snow gather on it and its branches will be broken.

61. Acacia tree has short roots.

They can't find water.

62. Kapok tree isn't tall.

Its leaves can't get sunlight.

63. Barbary fig don't have sharp spines.

Animals eat its leaves and fruits.

64. Chameleon couldn't change its color.

It can't hide from its prey or predator.

65. Chameleon's eyes were like the human's eyes.

They can't see in two opposite directions at the same time.

66. Panther chameleon is exposed to danger.

It puffs up its body, opens its mouth widely, changes its color.

67. Bull shark's belly has a dark color like its back.

It can't sneak up on its prey.

68. Caracal has a black fur.

It can't hide from its prey or predator.

69. Polar bear has thin fur.

It will get cold.

70. A chameleon stands on a green leaf.

Its scales color changes into green.

71. Blood vessels in penguin's feet aren't weaved around each others.

Its feet will freeze.

72. Penguin's body is covered with thin feathers.

It feels cold.

73. You stand barefoot on ice for 5 minutes.

Your feet will freeze.

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Choose:

- | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|
| 1. b | 13. b | 26. a | 39. b | 51. c | 63. c | 75. d |
| 2. d | 14. c | 27. b | 40. d | 52. b | 64. d | 76. c |
| 3. a | 15. d | 28. b | 41. a | 53. b | 65. b | 77. c |
| 4. d | 16. b | 29. d | 42. d | 54. d | 66. c | 78. d |
| 5. d | 17. c | 30. c | 43. b | 55. d | 67. b | 79. b |
| 6. c | 18. b | 31. b | 44. c | 56. d | 68. c | 80. d |
| 7. b | 19. b | 32. d | 45. c | 57. b | 69. b | 81. c |
| 8. b | 20. a | 33. b | 46. b | 58. a | 70. d | 82. d |
| 9. a | 21. b | 35. a | 47. c | 59. c | 71. c | 83. c |
| 10. b | 22. d | 36. b | 48. d | 60. b | 72. b | 84. b |
| 11. c | 23. b | 37. b | 49. a | 61. c | 73. b | 85. c |
| 12. d | 24. b | 38. b | 50. c | 62. c | 74. b | 86. b |
| | 25. d | | | | | |

- | | | | |
|-------|--------|--------|--------|
| 87. b | 99. b | 111. c | 123. c |
| 88. c | 100. c | 112. b | 124. d |
| 89. b | 101. c | 113. b | 125. a |
| 90. d | 102. d | 114. c | 126. d |
| 91. c | 103. d | 115. b | 127. c |
| 92. c | 104. b | 116. c | 128. b |
| 93. b | 105. d | 117. d | |
| 94. c | 106. c | 118. c | |
| 95. d | 107. c | 119. d | |
| 96. b | 108. a | 120. a | |
| 97. c | 109. b | 121. b | |
| 98. b | 110. b | 122. b | |

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Put (✓) or (X) :

1. X	16. X	31. ✓	46. ✓	61. X
2. X	17. ✓	32. X	47. X	62. X
3. X	18. X	33. ✓	48. ✓	63. X
4. ✓	19. X	34. X	49. X	64. X
5. ✓	20. X	35. X	50. X	65. X
6. X	21. X	36. ✓	51. ✓	66. X
7. X	22. X	37. X	52. X	67. X
8. X	23. X	38. X	53. ✓	68. ✓
9. ✓	24. X	39. X	54. X	69. X
10. X	25. X	40. X	55. X	70. ✓
11. ✓	26. X	41. ✓	56. ✓	
12. ✓	27. ✓	42. X	57. ✓	
13. X	28. X	43. X	58. ✓	
14. X	29. X	44. ✓	59. X	
15. X	30. ✓	45. X	60. X	

Write the scientific terms:

- | | |
|--------------------------------|---------------------------|
| 1. Adaptation. | 16. Sandy/tan. |
| 2. structural adaptation. | 17. scales. |
| 3. Behavioral adaptation. | 18. agama lizard. |
| 4. camouflage. | 19. Panther chameleon. |
| 5. Camouflage. | 20. Golden frog. |
| 6. Countershading. | 21. Migration. |
| 7. Countershading. | 22. Dark bear.
(Brown) |
| 8. Countershading. | 23. white fur. |
| 9. fatty. (fat) | 24. chameleon. |
| 10. Downy feathers. | 25. owl. |
| 11. Penguin. | 26. Mangrove tree. |
| 12. Antarctica (Polar habitat) | 27. water Lily. |
| 13. Fennec fox. | 28. Acacia tree. |
| 14. Arctic fox. | 29. Papok tree. |
| 15. Caracal. | 30. Giraffe |



31. KAPAK tree.

32. ACACIA tree.

33. ACACIA tree.

34. Camel.

35. Sharp Spines.

36. Smelly message.

37. Poison.

38. KAPAK.

39. Pine tree.

40. Pine tree.

41. Pine tree.

42. Digestive.

43. Respiratory.

44. Nervous.

45. Digestion.

46. Respiration.

47. Inhalation.

48. Exhalation.

49. Diaphragm.

50. Teeth.

51. Mouth.

52. Anus.

53. Anus.

54. Saliva.

55. Tongue.

56. Saliva.

57. Starch.

58. Esophagus.

59. Throat/Pharynx.

60. Stomach.

61. Small intestine.

62. Small intestine.

63. Small intestine.

64. Small intestine.

65. Large intestine.

66. Large intestine.

67. Blood.

68. Trachea.

69. Lungs.

70. Alveoli.

71. Alveoli.

72. Blood vessels.

73. Inhaled air.

74. Exhaled air.

75. Orange/Guava.

76. Trachea.

77. ~~Trachea~~ Lungs.

78. Amphibians.

79. Gills.

80. Skin.

81. Lungs.

82. Air pollution.

83. Echolocation.

84. Echo.

85. Sound waves.

86. Hearing.

87. Egyptian Mongoose.

88. Bat.

89. Snake.

90. Jerboa.

91. Owl.

92. Dolphin.

93. Nocturnal.

94. Spinal cord.

95. Brain.

96. Brain.

97. ~~Sensory receptors~~

97. Sensory organs.

98. Sensory receptors.

99. Electrical impulses.

100. Nerves.

101. Nerves.

102. Reflex Action.

103. Reaction time.

104. Large Ears.

105. Nose.

106. Hearing.

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Modle (1)

-choose the correct answer :-

- 1-. The presence of a thick white fur is an adaptation in
a. starred agama. b. polar bear c. fennec fox. d. forest bear.
2. All of the following sentences represent the meanings of adaptation except.
a. it is the characteristics that help living things survive.
b. it is the characteristics that help living things reproduce.
c. it is the changes that help the animal to find a prey.
d. it is the changes that causes the animal death.
3. In both human and owls, we find that the ability to see at night is.....
a. similar. b. different. c. greater in human than in owls.
d. better for human at night than during the day.
4. Animals that become active at night are called
a. diurnal animals. b. nocturnal animals.
c. extinct animals. d. endangered animals
5. To describe the delicious taste of a piece of chocolate, we should use the sense of
a. sight b. smell. c. taste. d. touch.

What happens if ... ?

1. Humans have both gills and lungs.
.....
2. The acacia leaves are not guarded by sharp spines.
.....

3-Write the scientific term of each of the following:

1. A group of different animals that look for their preys at night. (.....)
- 2-A property related to the bouncing back of sound to the dolphin when the sound waves hit objects under water. (.....)
3. A gas that is present in water and air, and supply amphibians with energy.(.....).
4. . The organ where saliva moistens the food. (.....)



Modle (3)

-choose the correct answer :-

1. Saliva in the mouth makes the food becomes soft and mushy with the help of
a. teeth only. b. tongue only. c. teeth and esophagus. d. teeth and tongue.
10. The throat is connected to the stomach through
a. esophagus. b. trachea. C. small intestine. d. large intestine
- 2- One of the animals that may eat acacia leaves, is
a. rat. b. caracal. c. penguin. d. giraffe.
- 3- All the following properties protect acacia leaves from being eaten by animals except that
a. they are high enough. b. they are guarded by sharp spines.
c. they are brightly colored. d. they produce a poison.
- 4-. The color of fur of fennec foxes protects them from
a. wind. b. rains. c. hot Sun. d. cold weather.
- 5- Fennec foxes have a tan-colored coat that provides in their environments.
a. camouflage b. respiration c. panting d. communication

2- Complete the following sentences :

1. The penguin's body can keep warm air against its skin through an insulating layer of and thick downy
- 2- Among the plants that can survive in habitats that have lackage of water are..... and
- 3- The wall of the absorbs the digested food into your bloodstream
- 4-In both human and fish, carry oxygen gas to all parts of the body.

-3- Give reasons for :-

- 1-The human body is made up of different systems.
.....
- 2-Gills is a unique structural adaptations in fish.
.....
- 3-The fennec fox has a tan-colored coat.
.....
- 4-Branches of acacia tree are gather on the top of its trunk.
.....



Modle (4)

-choose the correct answer :-

1. The needed energy to perform different functions of a living organism is obtained from
a. breathing only b. food processing only.
c. breathing and running. d. breathing and food processing.
2. All the following are organs in the digestive system except.....
a. mouth. b. nose . c. stomach. d. esophagus.
- 3-. Camouflage means that the animal
a. can be seen easily among its surrounding.
b. is hard to be seen among its surrounding. c. is easily to be seen by its preys.
d. can be seen easily by its predators.
- 4- The presence of a thick white fur is an adaptation in
a. starred agama. b. polar bear. c. fennec fox. d. forest bear.
5. Fennec foxes and arctic foxes live in burrows, this belongs to adaptation.
a. only structural b. only behavioral c. both structural and behavioral
d. neither structural nor behavioral

-3- Give reasons for :-

1-Human has a digestive system.

.....

2-Cars and factories exhaust cause breathing problems.

.....

3-Golden frog is an endangered species.

.....

4-The Egyptian mongoose make sounds.

.....

10 Look at the following photos, then choose the correct answer :

1. The sharpest senses that animal (1) has are ...
a. touch and smell. b. smell and hearing. c. taste and sight. d. hearing and taste.
2. Animal (1) uses one or both senses in each of the following situations except
a. identifying friends. b. identifying food. c. identifying strangers. d. tasting food.
3. The sharpest sense that animal (2) has is
a. hearing. b. taste. c. touch. d. smell.
4. Animal (2) uses its super sense in each of the following situations except ...
a. locating objects under water. b. avoiding danger. c. detecting smell of living organisms under water. d. locating preys under water.



Animal (1)



Animal (2)



Modle (5)

-choose the correct answer :-

- 1- Starred agama and salamanders,
 - a. both are reptiles.
 - b. both are amphibians.
 - c. the first is reptile, while the second is amphibian.
 - d. the first is amphibian, while the second is reptile.
2. The senses upon which you depend to hold a small radio playing at low volume in a dark room are
 - a. hearing and smell.
 - b. touch and taste.
 - c. smell and taste.
 - d. hearing and touch.
- 3- Which of the following senses we use during watching a film on the T.V? .
 - a. Sight and taste.
 - b. Sight and smell.
 - c. Hearing and touch.
 - d. Sight and hearing.
- 4- If amphibians have gills not lungs and cannot respire through skin, then
 - a. they cannot live outside water.
 - b. they can live outside water.
 - c. they cannot live underwater.
 - d. they can live in desert landscape.
- 5- In the, saliva moistens food and begins to break it down.
 - a. mouth
 - b. esophagus
 - c. small intestine
 - d. stomach.

2- Look at the following two pictures, then answer the questions [by writing habitat (A) or habitat (B)] :

1. Starred agama lizard and fennec fox live in.
2. We can find panther chameleon in
3. Amphibians cannot live in
4. Yellow body coats is most common in ...
5. Dry seasons is more dangerous for
6. Cutting down forest usually occurs in
7. The suitable ecosystem for barbary fig is
8. Caracals can live in
9. Arctic foxes cannot be found in
10. Kapok trees can grow in



Habitat (A)



Habitat (B)



Modle (6)

-choose the correct answer :-

1-. Fennec fox and caracal have..... that help them blend in with desert landscape.

- a. colorful scales b. thick white fur
C. sandy-colored feathers d. sandy-colored fur

2. Acacia tree trunk and camel hump,

- a. both store water. b. both store fat.
c. the first stores fat, and the second stores water.
d. the first stores water, and the second stores fat.

3. Crushing the food in your mouth is a function of

- a. stomach. b. tongue. C. saliva. d. teeth.

4-. Starred agama and salamanders,

- a. both are reptiles. b. both are amphibians.
c. the first is reptile, while the second is amphibian.
d. the first is amphibian, while the second is reptile.

5- All the following are correct about the mouth except.

- a. it is the first organ in the digestive system.
b. it has teeth. c. it has tongue.
d. it moves food to the stomach directly.



13 Study the following figure, then answer the questions :

1. What is the name of this animal and where this animal live?

.....

.2. Why the fur color of this animal changes between summer and winter seasons ?

.....

3. Mention one structural adaptation and one behavioral adaptation in this animal to adapt with the climate :

- Structural adaptation :

- Behavioral adaptation :

-3- Give reasons for :-

1-The starred agama lizard always looking for shade areas in desert.

.....

2-Burrow is an excellent place for arctic and fennec foxes

.....

(Answers) Modle (1)

-choose the correct answer :-

- 1-. The presence of a thick white fur is an adaptation in
a. starred agama. **b. polar bear** . c. fennec fox. d. forest bear.
2. All of the following sentences represent the meanings of adaptation except.
a. it is the characteristics that help living things survive.
b. it is the characteristics that help living things reproduce.
c. it is the changes that help the animal to find a prey.
d. it is the changes that causes the animal death.
3. In both human and owls, we find that the ability to see at night is.....
a. similar. b. **different.** c. greater in human than in owls.
d. better for human at night than during the day.
4. Animals that become active at night are called
a. diurnal animals. **b. nocturnal animals.**
C. extinct animals. d. endangered animals
5. To describe the delicious taste of a piece of chocolate, we should use the sense of
a. sight b. smell. **c. taste.** d. touch.

What happens if ... ?

5. Humans have both gills and lungs.
Human can breathe in both air and water
6. The acacia leaves are not guarded by sharp spines.
Animals can eat it

3-Write the scientific term of each of the following:

1. A group of different animals that look for their preys at night. (**Nocturnal Animals**)
- 2-A property related to the bouncing back of sound to the dolphin when the sound waves hit objects under water. (**echolocation**)
7. A gas that is present in water and air, and supply amphibians with energy.(**oxygen**).
8. . The organ where saliva moistens the food. (**Mouth**)



Modle (2)

-choose the correct answer :-

1. A snake has the ability to catch preys at night because ...
a. it can smell them. b. it can hear their heartbeats.
c. it can see them clearly at night. d. **it can sense the heat of their warm bodies.**
2. Both bats and mosquitoes become active during night. Which of the following statements is correct?
a. Both can swim well. b. Both can run fast. c. **Bats prey on mosquitoes.**
d. Mosquitoes prey on bats.
- 3-. The five senses of humans include
a. sight, hearing, touch, smell, and movement.
b. sight, movement, taste, touch, and smell.
c. taste, touch, movement, hearing, and smell. d. **sight, hearing, taste, smell, and touch.**
- 4- To know if a cup of water is hot or cold, we need to use the sense of ...
a. sight. b. hearing. c. smell. d. **touch.**
5. Golden frog and polar bear.....
a. both live in the same habitat. b. both can breathe in water.
c. both have the same body coat. d. **both are living organism.**

2- Put (√) or (x):

1. The desert lizard blend in with large green trees, to hide from its enemies. **x**
2. When the snow melts in polar regions, the thick fur coat of arctic foxes turns black.(**√**)
3. Sunlight transfers kapok tree's fluffy yellow seeds across the rainforest. (**√**)
- 4-. The spinal cord is the main control center of the body, which carries(**x**)

3- Give reasons for :- 1. Animals that live in hot regions become active at night.

To avoid high temperature

2-Dogs are used in guarding.

Because they can see in dark depends on the sense of sight

3-Starred agama and golden frog are two different species.

Bec. Agma lizard from reptiles while golden frog from amphibians

4-. Cars and factories exhaust increases in big cities.

Bec. Big cities are crowded with cars and factories



Modle (3)

-choose the correct answer :-

1. Saliva in the mouth makes the food becomes soft and mushy with the help of....
a. teeth only. b. tongue only. c. teeth and esophagus. **d. teeth and tongue.**
10. The throat is connected to the stomach through
a. **esophagus.** b. trachea. C. small intestine. d. large intestine
- 2- One of the animals that may eat acacia leaves, is
a. rat. b. caracal. c. penguin. **d. giraffe.**
- 3- All the following properties protect acacia leaves from being eaten by animals except that
a. they are high enough. b. they are guarded by sharp spines.
c. they are brightly colored. d. they produce a poison.
- 4-. The color of fur of fennec foxes protects them from....
a. wind. b. rains. c. **hot Sun.** d. cold weather.
- 5- Fennec foxes have a tan-colored coat that provides in their environments.
a. **camouflage** b. respiration c. panting d. communication

2- Complete the following sentences : •

1. The penguin's body can keep warm air against its skin through an insulating layer of **fat** and thick downy
- 2- Among the plants that can survive in habitats that have lackage of water are **tiny leaves** and **long roots**
- 3- The wall of the **small intestine** absorbs the digested food into your bloodstream through
- 4-In both human and fish, **blood** carry oxygen gas to all parts of the body.

-3- Give reasons for :-

- 1-The human body is made up of different systems.
Bec they work together to do all vital activities
- 2-Gills is a unique structural adaptations in fish.
Bec. Gills allow fish to take oxygen from water and release carbon dioxide
- 3-The fennec fox has a tan-colored coat.
To escape from its enemies
- 4-Branches of acacia tree are gather on the top of its trunk.
to not be eaten by most of animals and to store water



Modle (4)

-choose the correct answer :-

1. The needed energy to perform different functions of a living organism is obtained from
a. breathing only b. food processing only.
c. breathing and running. **d. breathing and food processing.**
2. All the following are organs in the digestive system except.....
a. mouth. **b. nose** . c. stomach. d. esophagus.
- 3-. Camouflage means that the animal
a. can be seen easily among its surrounding.
b. is hard to be seen among its surrounding. c. is easily to be seen by its preys.
d. can be seen easily by its predators.
- 4- The presence of a thick white fur is an adaptation in
a. starred agama. **b. polar bear.** c. fennec fox. d. forest bear.
5. Fennec foxes and arctic foxes live in burrows, this belongs to adaptation.
a. only structural **b. only behavioral** c. both structural and behavioral
d. neither structural nor behavioral

-3- Give reasons for :-

1-Human has digestive system

To break down food into smaller parts and the absorb it

2-Cars and factories exhaust cause breathing problems.

Bec. Air pollution makes the human hard to breath

3-Golden frog is an endangered species.

due to water and air pollution – destroying its natural habitat

4-The Egyptian mongoose make sounds.

To communicate with each other's

10 Look at the following photos, then choose the correct answer :

1. The sharpest senses that animal (1) has are ...

a. touch and smell. **b. smell and hearing.** c. taste and sight. d. hearing and ...

2. Animal (1) uses one or both of these senses in each of the following situations except

a. identifying friends. b. identifying food. c. identifying strangers. **d. tasting food.**

3. The sharpest sense that animal (2) has is

a. **hearing.** b. taste. c. touch. d. smell.

4. Animal (2) uses its super sense in each of the following situations except ...
a. locating objects under water.
b. avoiding danger. **c. detecting smell of living organisms under water.** d. locating preys under water.



Animal (1)



Animal (2)

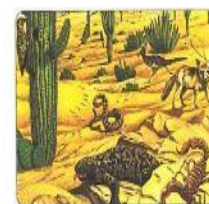


-choose the correct answer :-

- 1- Starred agama and salamanders,
a. **both are reptiles.** b. both are amphibians.
c. the first is reptile, while the second is amphibian.
d. the first is amphibian, while the second is reptile.
2. The senses upon which you depend to hold a small radio playing at low volume in a dark room are
a. hearing and smell. b. touch and taste.
c. smell and taste. d. **hearing and touch.**
- 3- Which of the following senses we use during watching a film on the T.V? .
a. Sight and taste. b. Sight and smell.
c. Hearing and touch. d. **Sight and hearing.**
- 4- If amphibians have gills not lungs and cannot respire through skin, then
a. **they cannot live outside water.** b. they can live outside water.
c. they cannot live underwater. d. they can live in desert landscape.
- 5- In the, saliva moistens food and begins to break it down.
a. **mouth** b. esophagus c. small intestine d. stomach.

2- Look at the following two pictures, then answer the questions [by writing habitat (A) or habitat (B)] :

1. Starred agama lizard and fennec fox live in **desert(A)**
2. We can find panther chameleon in **Tropical rainforest (b)**
3. Amphibians cannot live in **desert (a)**
4. Yellow body coats is most common in **desert(A)**
5. Dry seasons is more dangerous for **Tropical rainforest (B)**
6. Cutting down forest usually occurs in **(B)**
7. The suitable ecosystem for barbary fig is **(B)**
8. Caracals can live in **(A)**
9. Arctic foxes cannot be found in **(A&B)**
10. Kapok trees can grow in **(B)**



Habitat (A)



Habitat (B)



-choose the correct answer :-

1-. Fennec fox and caracal have..... that help them blend in with desert landscape.

- a. colorful scales b. thick white fur
C. sandy-colored feathers **d. sandy-colored fur**

2. Acacia tree trunk and camel hump,

- a. both store water. b. both store fat.
c. the first stores fat, and the second stores water.
d. the first stores water, and the second stores fat.

3. Crushing the food in your mouth is a function of

- a. stomach. b. tongue. C. saliva. **d. teeth.**

4-. Starred agama and salamanders,

- a. both are reptiles. b. both are amphibians.
c. the first is reptile, while the second is amphibian.
d. the first is amphibian, while the second is reptile.

5- All the following are correct about the mouth except.

- a. it is the first organ in the digestive system.
b. it has teeth. c. it has tongue.
d. it moves food to the stomach directly.



13 Study the following figure, then answer the questions :

2. What is the name of this animal and where this animal live?

Arctic fox live in tundra desert

.2. Why the fur color of this animal changes between summer and winter seasons ?

To help it sneaks up preys any time

3. Mention one structural adaptation and one behavioral adaptation in this animal to adapt with the climate :

- Structural adaptation : **it has short ears and legs to help it to stay warm**
- Behavioral adaptation : **live in burrows to stay warm – eat different kinds of food**

-3- Give reasons for :-

1-The starred agama lizard always looking for shade areas in desert.

To stay away from the hotness of sun

2-Burrow is an excellent place for arctic and fennec foxe

.to stay warm at night